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THE OIL WEEKLY

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LOOKING AHEAD
... with the Editor

WATER-FLOODING oil horizons in pressure-depleted fields has been responsible for the recovery of many millions of barrels of crude oil. So successful has this method of secondary recovery proved in many parts of the United States, that it is now being relied upon as the chief means of supplementing flush production. A tremendous amount of research is being done to improve water-flooding techniques and determine the most effective ways to carry on the operation.

As practiced today, systematic water-flooding requires such close spacing of wells that certain important factors must be considered in order to achieve economically satisfactory results. In Oklahoma, where water flooding was first started in 1931, operators have confined the method to a more or less restricted area where sand conditions are suitable and where shallow depths prevail. This area comprises the Delaware-Nowata-Chelsea district, of northeast Oklahoma where the Bartlesville sand is at depths ranging from 350 to 750 feet and has afforded an opportunity for the development of water flooding at reasonable cost. Of the 73 flooding projects in the state, 58 are in this general area.

David M. Logan, petroleum engineer, reviews procedures and results of water flooding in Oklahoma, in a well illustrated article due to appear in an early issue.

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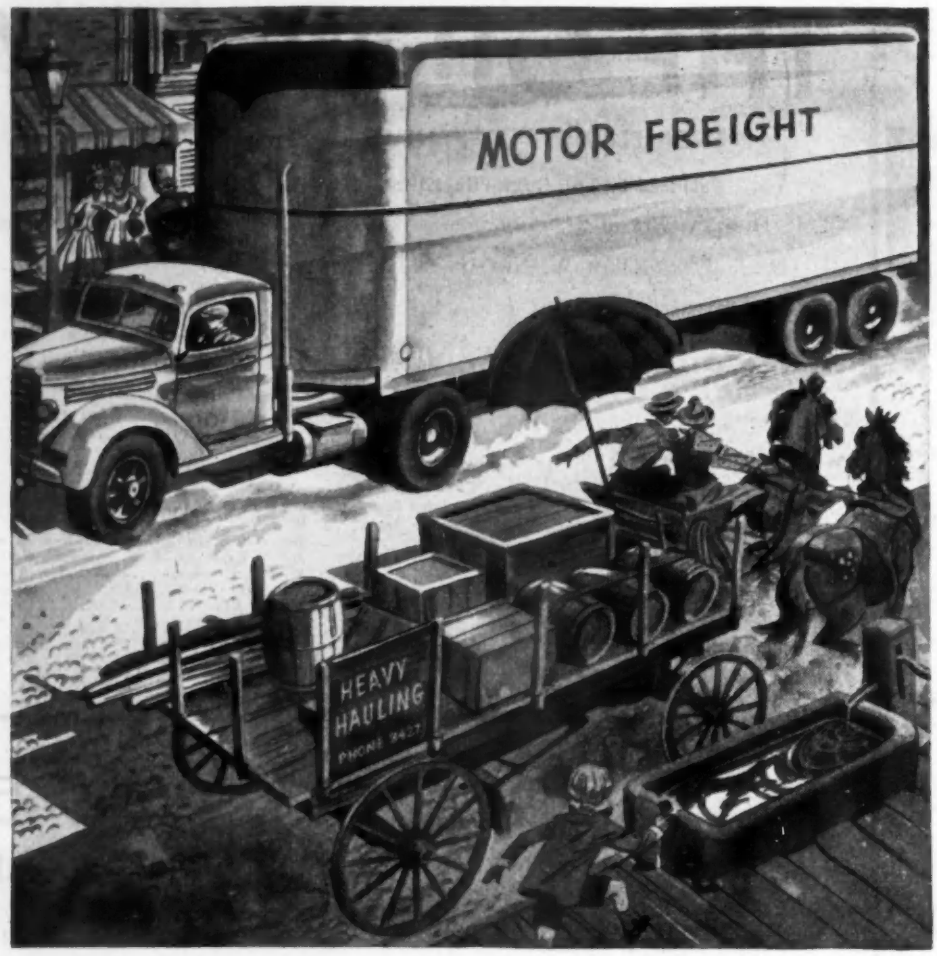

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The Changing Panorama

Why Rush and Secrecy On Alaskan Activity?

THE War Department's venture into the oil business via Canol has turned out to be, as was prophesied by oil men, an expensive fiasco, which reminds us of the secrecy with which the War Department attempted to cloak its efforts up there. We have never credited General Somervell with any more acumen than he would likely attribute to a freshly commissioned second lieutenant but it is not beyond the bounds of credibility that even he may have felt that Canol was a half-baked experiment. At the time when the work was under way the affair was held to be of such a highly confidential nature that samples of Fort Norman crude were taken away from oil men who happened to be visiting the area then, this despite the fact that analysis of Fort Norman crude had been widely published years before!

And now the Navy is engaged in exploratory work in Naval Petroleum Reserve No. 4 which cannot possibly have any bearing on this war. In fact, we doubt if the navy would contend for a moment that its present exploration work is remotely a World War II emergency proposition. Naval Petroleum Reserve No. 4 is in the extreme north part of Alaska where such ports as are available are closed about 90 percent of the year.

We, of course, have no fault to find with our government exploring its petroleum reserves to determine, insofar as is possible, their value, but we think that the Navy should be practical in the matter and not engage in this work at a time when equipment and men being used on it are desperately needed elsewhere. Of course there isn't a lot of equipment involved, one rotary drilling rig and some core drilling equipment, but why use even that in such a remote place, when there isn't enough equipment available to drill wells where oil can be found and from which more oil *must* be taken immediately. Again we see the same type of secrecy being thrown around this naval operation as was used on Canol. And frankly we do not believe that security is the important factor in the secrecy.

THE OIL WEEKLY has no quarrel with the men who are carrying out the orders of the powers that be. They are doing only what they are told to do. But we do wonder about this unseemly haste in time of war.

Is it possible that the present work in Alaska is caused by hostility between two governmental departments and the desire of one to beat the other to the draw?

Counteracting the Circuit Court Decision

IT IS imperative that the uncertain position in which the industry has been placed by the court decision on intangible drilling be definitely clarified. It is to be hoped this can be accomplished quickly, and with results favorable to the industry. Until this is done, the situation will remain uncertain and confused. This will cause oil men to adopt a cautious attitude, and bring about cancellation of plans for drilling many wells. Already some instances of such cancellations have come to light, and unquestionably there are numerous others.

There appear to be two avenues through which the decision may be counteracted. One is through the courts, and the other is by congressional action. Unquestionably, it would be wise for the industry to avail itself of both approaches, as undoubtedly it will do.

It is to be hoped the court will grant the appeal for a rehearing, and representatives of the industry will be permitted to file briefs. Unfortunately, this will take time, perhaps a year. If it should be necessary to carry the case to the Supreme Court, even more time would be required. This will be entirely too long a time to allow the confusion that has been created to exist.

Congressional action might be obtained quicker, although immediate action from this course can hardly be expected. Due to the extremely important role of oil in the prosecution of the war, and the absolute necessity of drilling additional wells, many feel Congress may be the quicker approach and also be more likely to act favorably.

Along with plans for both court and legislative action, the industry should not overlook the advantages of getting publicity. Proper presentation to the public of the significance and effect of the New Orleans decision would be helpful in procuring more prompt and perhaps favorable consideration.

Best Chance Now for Legislative Action

EVERYWHERE oil men gathered last week, conversation immediately turned to the court decision holding intangible drilling costs are not deductible as expense. No event has caused such widespread discussion since the first wartime regulation on oil operations and materials were issued four years ago. It is certainly a most serious blow in that it affects the very foundation of the industry, for drilling programs, financial investments, lease values and other operations for 27 years have been based upon the practice of deducting intangible drilling costs from income taxes. (Further details on the legal aspects of the ruling and its importance are given on page 42).

In one respect the ruling of the court could not have come at more inopportune time. The industry is producing the unprecedented quantity of oil required for prosecution of the war with difficulty. Current production exceeds maximum efficiency rates. The need for drilling as many wells as material and manpower shortages will permit is absolutely essential, if production is to be maintained at high enough levels to satisfy war needs. PAW has pointed out the nation's producing ability would decline 300,000 barrels daily by the end of this year if all drilling were stopped, and that there would be an additional 350,000 barrel decrease in producing ability by the end of 1946 unless the industry achieves PAW's drilling program. The decision of the court will certainly have a retarding influence on the number of wells the industry will drill, some say a more harmful effect than further loss of men and materials. Thus serious injury to the war effort may result. It is unfortunate the ruling came when the drilling of wells is so important.

On the other hand, if it had to come, such a decision handed down when drilling is so important, provides the industry with a most excellent chance of getting quick and favorable legislative action. While, of course, this is a selfish industry viewpoint, it nevertheless, is true.

☆

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—Senator Owen Brewster, of Maine.

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Natural Gasoline Surplus Problem

RECENT cessation of tank car movement of natural gasoline from PAW District 3 to District 1 has created a serious problem of what to do with 3000 to 4000 barrels of this product daily, much of it in Texas. Most of the storage suitable for this type of product is being used by the military. Consequently, the surplus resulting from stoppage of rail shipments threatens soon to overflow tankage available to the industry.

Unless a solution is found quickly it almost certainly will result in decreased output of products vital to the manufacture of aviation gasoline, synthetic rubber and toluene. These critical items cannot be produced except with incidental production of natural gasoline, yet plants will have to suspend operations when their natural gasoline storage space is filled.

Relief may be obtained through the expedient of introducing it into the Big Inch line for transportation with the crude oil stream to the Atlantic Seaboard, where it is badly needed to help manufacture motor gasoline. Introduction of 3000-odd barrels daily into the Big Inch probably would not lower the throughput of crude. On the contrary, mixing natural gasoline with the crude stream might actually increase deliveries through the pipe line, since it would act as a flux, causing easier movement of the lower gravity crude and increasing the velocity of the entire stream. However, it would take time to put such a plan into effect.

Inasmuch as natural gasoline is readily converted into premium motor gasoline by the addition of smaller quantities of tetraethyl lead than necessary to bring most gasolines made from crude up to the same octane rating, it might be presumed Texas operators could dispose of the problem in this way. However, here again plant operators run into trouble with government regulations. Plants are allowed to manufacture only ⅜ of the amount of premium gasoline they were making during the base period of 6 months prior to April 1, 1944. Many larger operators were making 87-aviation and 80-all purpose gasoline during that base period, and were making no premium motor fuel at all. Consequently, they are unable to obtain allocation to use lead for manufacture of premium motor fuel. Some are actually excluded from this market. Several plants could make more 72-octane civilian motor gasoline at this time, but there is no storage capacity, for the same reason that there is none for natural gasoline. Furthermore, present allocation of motor fuels in the district can be met without additional gasoline.

Draft Plan's Effect On Oil Production

THE petroleum industry is among those seeking relief from the plan to draft into military service 70 percent of all men under 30 years now in essential industries. In filing a preliminary request with War Mobilization Director James Brynes last week, PAW asked that only 40 percent, instead of 70 percent, of these young men be drafted.

It is understood PAW told Brynes the drafting of 70 percent of the men under 30 would result in a decline of 165,000 barrels daily in producing capacity by the end of 1945. PAW is said to have declared this decline could be cut to 85,000 and 125,000 barrels respectively, if only 40 percent of the men under 30 were taken from production operations.

To support its request with more accurate and full information, PAW has asked the industry to furnish it with information as to how much loss of production will occur if 70 percent of the employes under 30 are drafted. District committees are working on this.

Industries Getting Relief From Draft

HAVING granted five industries relief from the plan to draft into military service all but 30 percent of the men now in essential industries who are under 30 years old, War Mobilization Director James Brynes is now under pressure to grant similar relaxation to other businesses. The ice having been broken, undoubtedly there will be relief coming to at least a few more industries now seeking such consideration.

Since the military forces have not reduced their draft call, all this can mean is that more men of the next higher age bracket, 30 to 34 years inclusive, will be drafted. Every 30 year old not called up must be replaced by the drafting of an older man. Of course, those industries fortunate enough to receive relief from the 70 percent draft plan for men under 30 will gain at the expense of less essential industries.

Our Readers Lend A Willing Hand

EDITORS of THE OIL WEEKLY wish to thank those readers who, in response to a recent letter, sent in several hundred suggestions as to subjects to be presented in our pages during the coming year. More than 700 suggestions were received, many of them duplicating other suggestions but thereby indicating the degree of interest, and the editorial staff, at a recent conference gave detailed attention to every suggestion offered. As a result of the letters from our readers and the conference held on them, the backbone of THE OIL WEEKLY's editorial content for the next twelve months was developed.

THE OIL WEEKLY for several years has followed the practice of holding a conference at which time editorial plans for the succeeding 12 months were worked out. Prior to 1944 suggestions were invited from a small cross-section of readers but last year and this it was decided to address letters to practically all subscribers. The results have been very gratifying.

Fear of Too Much Government

THE Conference of Small Business Organizations which represents groups with an affiliated membership of approximately 600,000 individual concerns in the United States, recently conducted a national survey to try to determine the source of dissatisfaction and distress of small business. Tabulations of these returns indicate that small business has the following fears in the order named:

1. Fear of postwar bureaucracy and regimentation.
2. Fear of inability to retain sufficient earnings to remain in business.
3. Fear of economic dictatorship.
4. Fear of government subsidized competitions.
5. Fear of politics remaining in business.
6. Fear of inability to borrow money for reconversion and postwar periods.
7. Fear of big business.

It is significant that the three top fears are all tied up in government activity. In fact the entire list with the exception of the last, are fears founded on government and political factors, indicating that our government is not inspiring the confidence among small businessmen that they should have.

A HELPING HAND TO PRIVATE INDUSTRY

and to the men who return from war

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Box 1498 Oklahoma City, Oklahoma

WASHINGTON ROUNDUP

By BERTRAM F. LINZ, Washington Correspondent

PAVING the way for prompt congressional action in the event the Internal Revenue Bureau seems to make generally effective the principles regarding the accounting of intangible drilling expenses laid down by the Federal Circuit Court in the F H E Company case, Representative Daniel A. Reed of New York last week introduced legislation to incorporate formally in the law the option now permitted by the Treasury.

Bowles Explains Accounting Rule—As Reed prepared to introduce his bill, Price Administrator Chester A. Bowles rejected all pleas for the consideration of percentage depletion in computing costs for the extractive industries, telling the Senate Banking and Currency Committee that if it were taken into account, OPA would have to set up "cost-plus" pricing and compute ceilings for companies individually rather than for whole trades.

Tires No. 1 War Problem—Another major development of the week was the release of a rubber report by the WPB in which rubber was denominated the most critical strategic commodity and tires the No. 1 war problem. No hope whatever was held out for tire relief this year and little change of great improvement was foreseen before the defeat of both Germany and Japan.

Green Light for Oil Investigation—Congressional approval of continuance of the oil investigating group of the House Interstate and Foreign Commerce Committee brought with it hints of new studies of importance to the industry, Representative Clarence A. Wolverton of New Jersey listing for the House possible inquiries into depletion, policy for encouraging increased production, the foreign oil situation and oil exports, as well as natural gas conservation and pipe line policy.

PAW Funds Trimmed—Among appropriations recommended for the fiscal year beginning July 1 is $4,345,000 for PAW, which is about $1 million less than the fund for the current year. OPA's figure took a sharp rise.

April Certifications at New High—PAW certifications for April set a new record for production, a gain of 34,450 barrels over March being registered in the total of 4,827,800 barrels.

Federal Oil Subsidies Condemned—The National Conference of Petroleum Regulatory authorities has gone on record condemning the oil subsidy and demanding a general increase in crude prices.

House Bill Introduced Counteracting Adverse Tax Ruling of Circuit Court

Legislation which would overturn the decision of the Federal Circuit Court of Appeals in the F. H. E. Oil Company case by incorporating in the Internal Revenue Code a provision for the optional treatment of intangible drilling costs was introduced in Congress March 21 by Representative Daniel A. Reed of New York, second ranking Republican member of the House Ways and Means Committee, which has jurisdiction over such legislation.

The bill would make specific provision in the revenue code, retroactive to January 1, 1938 for "all expenditures for wages, fuel, repairs, hauling, supplies, and so forth, incident and necessary for the drilling of wells and the preparation of wells for the production of oil or gas," provided that, at the option of the taxpayer, they may be deducted from gross income as an expense or charged to capital account.

Non-Productive Charge Offs

In addition to the foregoing option, the bill provides that the cost of drilling non-productive wells may also be deducted from gross income for the year in which the well is completed or be charged to capital account returnable through depletion as in the case of productive wells.

Industry representatives in Washington declared that if the decision of the Circuit Court is permitted to stand "very serious consequences" will follow the application of the principle laid down in the decision, and drilling will decline materially.

A considerable time will elapse before a final verdict is delivered in this case, however. Regardless of the result of the company's motion for a re-hearing, the issue is seen as headed for the Supreme Court, where only two months of the term remain before the summer recess. The case, accordingly, could not be heard before next fall, with little likelihood that the court's opinion would be handed down before late November.

Pointing out that the Circuit Court commented upon the conflict within the Treasury over the treatment of intangible drilling costs, Russell B. Brown, general counsel for Independent Petroleum Association of America, asserted that the question has been repeatedly raised before congressional committees, which have left no doubt regarding their position.

"The last time," Brown said, "was in 1942, when the Senate Finance Committee and the House Ways and Means Committee heard the entire case of depletion and intangible drilling costs. The Treasury Department then sought to obtain an express prohibition as to the expensing option and argued the point at length. The very refusal of these committees to amend the law in the manner proposed by the Treasury Department appears to me to be legislative approval of the regulation which now has been held invalid by the court.

"We have been accustomed in late years to disputes between departments of government and of conflicts as to purpose and jurisdiction. It is something new when a quarrel within a department is taken in the courts for solution."

Wickersham Plans Bill

A bill to definitely define the cost of drilling for oil and gas as an operational expense deductible on income tax returns also has been prepared by Representative Victor Wickersham of Oklahoma for immediate introduction.

Congressman Wickersham declared that the Circuit Court decision was injurious to the war effort and that its application may destroy the smaller operators, cripple the medium operator and most certainly will slow wildcatting and exploratory work at a time when the need for oil is at its greatest.

Bitter Tax Fight Seen When Congress Attempts to Close Co-ops' Loophole

One of the bitterest tax fights in years may be precipitated when Congress next takes up the question of general revenue law revision, when the Treasury Department is expected to urge that the tax exemptions which have helped to make cooperatives "big business" be wiped off the statute books.

For some time members of the House Ways and Means Committee, vested with the responsibility of originating all revenue legislation, have been eyeing the cooperatives, one of several groups which have been exempt from income taxes. Another of these groups is labor unions. With new sources of revenue urgently needed to meet high war costs, these exempt groups represent a considerable loss to the Treasury. Moreover, business men, competing with the cooperatives under the handicap of heavy taxes, were asking embarrassing questions as to "how come?"

As the committee dug into the subject it developed some interesting points; Most of the cooperatives assisted by tax exemption had grown strong enough to stand on their own feet—in fact, many had definitely become million-dollar organizations; the tax exemption was making it possible for them to return to members dividends (not termed such) far in excess than any corporation could declare; many were spreading rapidly, cutting into the business of concerns which paid taxes, thus hitting the Treasury again.

Labor Union Incomes

Labor unions also were found to have large incomes from which the government derived no taxes, and as the first step toward getting at that revenue, and incidently protecting taxpaying business from increasing government-subsidy competition, the committee wrote into the revenue bill enacted in 1944 a provision requiring cooperatives and unions to file information returns with the Internal Revenue Bureau annually, showing gross income, receipts, disbursements, etc.

"Many of these exempt corporations and organizations are directly competing with companies required to pay income taxes," the committee said in its report to the House, adding that "this practice is becoming more widespread and affording a loophole for tax evasion.

"These organizations were originally given this tax exemption on the theory that they were not operated for profit, and that none of their proceeds inured to the benefit of shareholders," it was explained. "However, many of these organizations are now engaged in operation of apartment houses, office buildings, and other businesses which directly compete with individuals and corporations required to pay taxes on income derived from like operations."

Would Close Loophole

The first report to be filed covered operations of the cooperatives in 1943 and, the report said, "it is the intent of your committee to make a thorough study of the information contained in such returns with the view to closing this existing loophole and requiring the payment of tax, and the protection of legitimate companies against this unfair situation."

The Internal Revenue Bureau has been correlating information shown on the cooperatives' returns and, when the time comes, will have available for Congress some interesting information as to the number of such organizations, their widespread activities, the volume of business, profits and taxes they have been saved, etc.

Under the stimulus of tax exemption some of these cooperatives have begun to assume the proportions of trusts, some vertical and others horizontal. Some of the organizations, for instance, produce their own oil, refine and transport it and sell, others grow wheat and manufacture flour for sale, both a vertical form of organization; others handle agricultural commodities, then branch out into agricultural implements, construction materials and so on, the horizontal type.

When the question of taxing the cooperatives comes up, it will find Congress sharply divided. Members from the agricultural states will be behind the cooperatives, which already have the strong support of the Department of Agriculture and have built up powerful organizations, such as the American Farm Bureau Federation and the National Grange, headed by men with plenty of "know how" when it comes to killing adverse legislation or pushing bills favorable to their members. On the opposite side will be members of Congress from the urban districts, backed up only by the Treasury Department. Normally, the labor unions might support the latter group, but this time they probably will join the cooperatives in fighting a proposal which, if not directly providing, would pave the way for taxation of unions.

Workers Are Recruited for Refinery in Saudi-Arabia

Twelve hundred free Italians from Eritrea have been recruited for construction work on the Ras Tanura refinery of the Arabian American Oil Company in Saudi-Arabia, PAW has reported.

In an effort to complete the refinery before schedule, the company has hired also all the Arabs, Iraqi, Indians and others who would work on the project.

Families of the Italian workers were returned to their homeland in 1941 and 1942 but the men were more or less stranded in Eritrea, where they had been employed on an American construction project after the British took over the Italian colony. They signed up for the refinery job to accumulate enough money to return to Italy.

Completion date of the project and its refining capacity cannot be disclosed for military reasons, PAW said.

House Oil Committee May Study Gas Conservation

Many important studies are ahead for the oil investigating subcommittee of the House Interstate and Foreign Commerce Committee, the House was told March 20 as it passed a resolution continuing the life of the group.

The confidence of the House in this subcommittee, which has been conducting investigations since 1934, was indicated in the suggestion that it take steps to protect its jurisdiction against the House Small Business Committee, which has also investigated oil, and other committees which might like to get into that field.

Possible fields of activity for the oil subcommitteee were outlined to the House by Representative Charles A. Wolverton of New Jersey, ranking Republican member. They include, he said: The question of whether there has been a serious depletion of our domestic oil reserves; what policy should be adopted to encourage new discoveries in order that there might be increased production; what should be our foreign policy with respect to the use of oil produced in foreign fields and the extent to which domestic oil, with safety to our own needs, be exported for foreign use.

Wolverton pointed out that there are also related subjects which may come before the subcommittee, including the prevention of waste of natural gas and the policy to be pursued with reference to war emergency pipe lines as a means of transportation.

During the debate there was no criticism whatever of the subcommittee, but a number of members commended the work it has done.

Smaller War Plants Group Approves Initial Oil Loan

The Smaller War Plants Corporation last week approved its first loan to a small oil producer, marking the adoption of a policy suggested by the House Small Business Committee to relieve a credit shortage situation which was working a hardship on small producers.

It was indicated that further loans may be consummated in the near future, under a policy adopted by the SWPC of which the following are the main points:

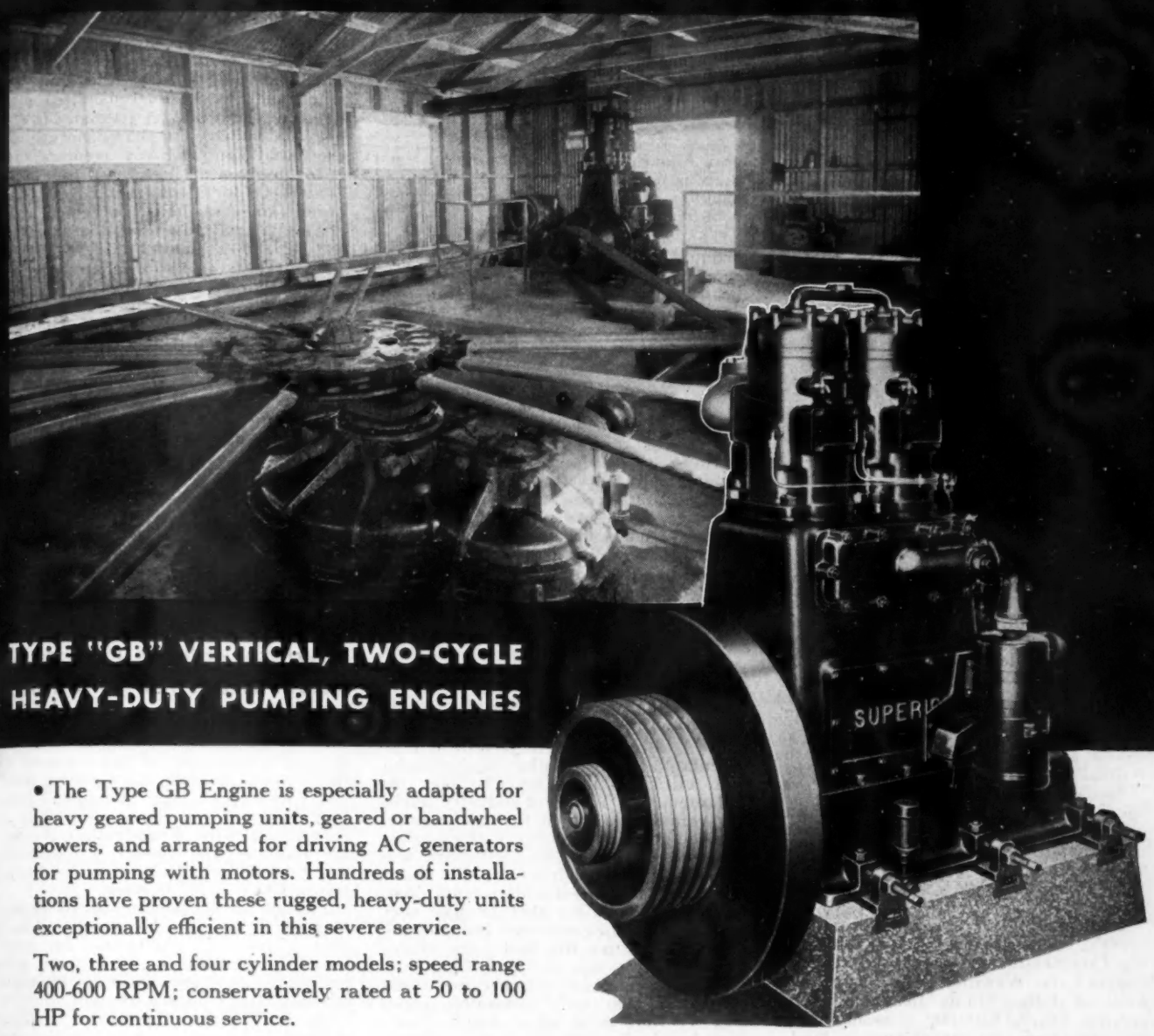
1. Financial aid may be rendered for cleaning out existing and presently producing oil wells to increase production when recommended by a technical authority.

2. Financial aid may be rendered to purchase pipe, tubing rods and pumping uits, and to place wells on pipe lines.

3. No financial assistance will be given in the drilling of new wells, and the board will consider an application for financial assistance to drill new wells only in cases where the particular project is for war purposes and is strongly sponsored by PAW.

Kansas Hearing Set

The Kansas State Corporation Commission will consider market demands and fix state and pool allowables for April at a hearing in Wichita March 30.



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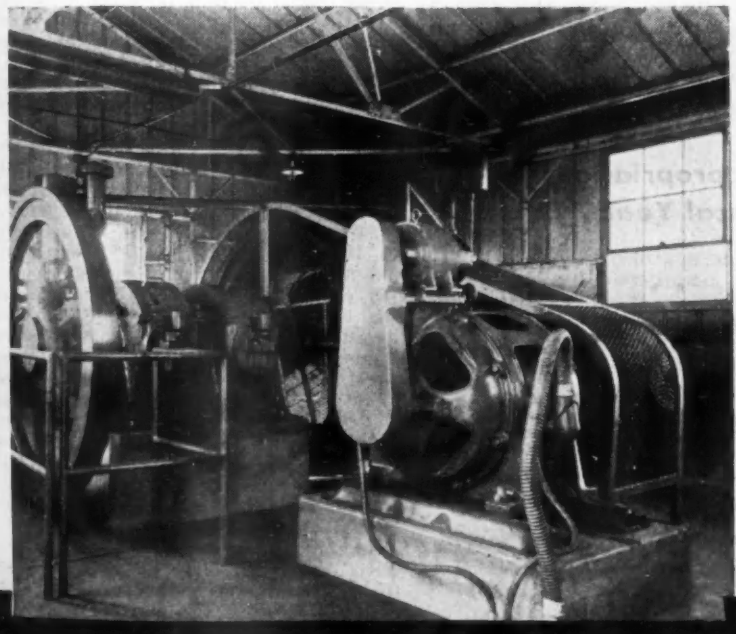
• The Type GB Engine is especially adapted for heavy geared pumping units, geared or bandwheel powers, and arranged for driving AC generators for pumping with motors. Hundreds of installations have proven these rugged, heavy-duty units exceptionally efficient in this severe service.

Two, three and four cylinder models; speed range 400-600 RPM; conservatively rated at 50 to 100 HP for continuous service.



ELECTRIC POWER FOR PUMPING WITH MOTORS

• For oil field central station generator service, Superior Type BTE and CTE Gas Engines combine low investment cost and minimum operating and maintenance expense with maximum efficiency, dependability and long life. The table below shows actual KW capacity of the engines based on rated loads at speeds indicated—not on maximum HP capacity.

Type	Bore & Stroke	No. Cyls.	Fuel	RPM	KW Gas	KW Oil
CTE	13¼ x 16	2	Gas or Oil	275	100	84
BTE	15 x 18	2	Gas	250	125	..

Oil Regulatory Authorities Condemn Federal Subsidy, Want Price Increase

Adoption by the National Conference of Petroleum Regulatory Authorities at its recent meeting in Washington of a resolution condemning the oil subsidy and demanding a general increase in crude prices was disclosed March 22 by Representative Charles W. Vursell of Illinois.

Inserting the resolution into the Congressional Record, Vursell told the House that above-ground oil storage now is at an all-time minimum and there is no longer any unused, untapped backlog of oil so far as production is concerned.

The OPA premium plan has not brought about greater production, he charged, adding that "there is practically no one in the administration today that will even attempt to prove by argument, factors or figures that subsidies now in use by the administration are sufficiently increasing production.

"It is a known fact that the price of crude oil has been held too low for almost three years now and that we must have an increase to get greater production," Vursell said. "In fact, we may find ourselves running into an oil shortage, as we are approaching a meat shortage today, because of unwise policies of the OPA and the administration responsible for such officials. Nothing short of a raise in the price of oil will bring about an increase in the production of oil.

"I hope the Secretary of the Interior, who certainly knows more about oil production than Chester Bowles, at the head of the OPA, will keep up his fight for an increase in the price of oil."

OPA also came under fire from Representative A. L. Miller of Nebraska, who criticized its failure to take the judgment and advice of industry advisory committees which the law requires shall be consulted before regulations are put into effect. Miller's criticism was based on a letter from H. H. Hahn, secretary of Nebraska Petroleum Marketers, Inc., relating that he had been a member of the petroleum industry advisory committee but had been unable to see that it was accomplishing anything, and his organization came to the conclusion that such committee meetings as were held were simply "window dressing" to discuss matters already decided upon.

Hahn said that his group had worked with harmony with representatives of the OPA's Omaha office until early this month, when the regional director at Chicago discharged the men who had worked with the industry committee.

Millions at Stake in Federal Tidelands Fight

Oil producers operating in the California tidelands would stand to lose millions of dollars in the event title to those lands was found to lie in the federal government as a result of a test suit based on leases which Secretary of the Interior proposes to grant as a means of bringing the question before the courts, Representative Clyde Doyle of California declared March 22.

Doyle disclosed that Ickes recently told him that if the federal government were held to be the owner of the lands it "might well expect that royalties already paid or accumulated would be federal property.

Issuance of the leases has been held up only by the necessity of obtaining corrections in applications which were overlapping, Doyle said, revealing that Ickes proposed to grant applications in the Long Beach area as well as elsewhere.

Confirmation of the federal government's claim to the coastal tidelands, the Congressman asserted, might mean claims from Washington for many millions of dollars, Long Beach alone receiving nearly $500,000 a month from oil operations on its tidewater lands. Also involved, he pointed out, are vast investments in piers, docks, wharves, warehouses and other harbor facilities not only in Long Beach but in all coastal communities, making the question one of national interest rather than a problem merely for a few areas where oil lies under the tidelands.

"It is clearly not a case wherein it is necessary that these tide and submerged lands be thus claimed by the federal government in order to have oil for war needs," Doyle said. "These lands are already producing oil under the Petroleum Administration's jurisdiction, and if more oil is needed, I am told it can be efficiently and promptly produced.

"It is not essentially in the public's interest that our federal government now undertakes to recede from its established judicial and procedural policy and practices of more than 100 years and upset a fundamental property right and ownership which has naturally evolved out of the foundation principles of good faith and performance by the states and by those who have subsequently also in good faith and with reliance, acted upon and in accordance with these firmly established standards."

PAW Appropriation for Next Fiscal Year Trimmed

Asking an appropriation of $1,120,453,000 for operation of 19 civilian war agencies during the fiscal year beginning July 1, President Roosevelt told Congress March 22 that PAW would need $4,345,000, approximately $1,000,000 less than its fund for the current year. The reduction in money needs, the President explained, is "largely due to improved operating efficiency within the agency and to the substantial completion of the 100-octane gasoline construction program."

Most of the agencies will operate on less money during the coming fiscal year, but the cuts were not of such proportions as to indicate any material relaxation of controls after the defeat of Germany.

On the contrary, the actual decrease of $46,000,000 shown in the total requested is considerably less than half the $113,000,000 reduction anticipated when the President transmitted tentative lump-sum budget estimates to Congress in January. In sharp contrast with the cuts taken by many agencies, OPA is to be given an increase of more than $15,000,000 for a total of $178,000,000 to permit an intensified enforcement drive.

The War Production Board will get $48,042,000, a cut of $12,500,000, the ear-marking of more than originally contemplated being due to expected "continuation of a tight civilian supply situation during the next fiscal year," and to provide for meeting the constant changes anticipated in the military program due to strategic considerations and battlefield experience.

The appropriation for Selective Service is designed to provide for the induction of approximately 93,000 men a month after July 1, up to which time some 135,000 a month will be needed.

The Foreign Economic Administration is given $19,002,800 an increase of $1,000,000 to provide enlarged staffs to prepare plans for the economic control of enemy countries and the review of supply programs in liberated areas.

Bowles Explains Proviso About Accounting Methods

OPA policy with respect to pricing for the extractive industries does not infringe congressional requirement for the use of "established accounting methods" in recognizing sustained depletion but not percentage depletion in calculating costs of production, the Senate Banking and Currency Committee was told March 21 by Price Administrator Chester A. Bowles.

Explaining the position of his agency, Bowles declared, "the proviso doesn't give sellers the right to use any established accounting method they wish, but on the contrary, it simply limits the administrator's choice of methods if he wishes to require the use of a single method to determine any particular cost. The proviso limits his choice to an established accounting method."

OPA's practice, he insisted, in no way implies any question of the appropriateness of percentage depletion for tax purposes, and there has been no discussion of the matter whatever with the treasury.

"I hope none of the committee has had the idea that the accounting methods proviso goes beyond method and actually governs the establishment of maximum prices," Bowles concluded.

"If the National Coal Association's amendment (requiring recognition of percentage depletion) were adopted, and we had to treat percentage depletion as an actual cost for all the extractive industries in this country, with statutory rates running up to 15, 23½ and 27½ percent, we should have to raise the prices of many industries which are more prosperous now than they have been for a great many years. But of course, depletion is only part of the trouble the proposed amendment would cause us. If we had to recognize emergency amortization on a five-year basis regardless of the actual useful life of the facilities involved, price increases resulting would be substantial."

New Oil Production High for April Is Set By Certifications of PAW

A new high in crude production is called for by PAW in its April certifications, providing for a daily output of 4,827,800 barrels, an increase of 34,450 barrels over the March production rates.

Natural gasoline and condensate production is estimated at 329,160 barrels a day, compared with 325,410 barrels a day this month.

Texas is given a new all-time production rate of 2,330,000 barrels daily of all petroleum liquids, an increase of 10,000 barrels in crude and 4000 barrels in natural gasoline.

"An increase in the tank car movement of West Texas crude oil to the Pacific Coast from 15,000 barrels daily during March to 20,000 barrels daily during April will increase the outlet for crude from the West Texas areas, where some productive capacity within maximum efficient production rates still exists," Deputy Administrator Davies explained.

"In addition, crude oil stock levels of West Texas type crude have continued to decline until they are approaching the minimum levels desired for flexibility of operations. The increased certification is necessary to provide current production to meet requirements without drafting on stocks."

Five other states will join with Texas in providing the increased crude output called for by PAW, Illinois, Indiana and Oklahoma, in District 2, Colorado in District 4, and California. Rates for all the other producing states will remain at March levels.

Specific rates for daily crude production by states are as follows (in barrels):

District 1: New York, 13,000; Pennsylvania, 39,000; West Virginia, 8200.

District 2: Illinois, 205,000, against 198,000 in March; Indiana, 12,500 against 12,000; Kansas, 274,000; Kentucky, 32,000; Michigan, 47,000; Nebraska, 1000; Ohio, 8000; Oklahoma 365,700 against 363,000.

District 3: Alabama, 300; Arkansas, 80,000; Louisiana, 360,000; Mississippi, 53,000; New Mexico, 105,000; Texas, 2,170,000 against 2,160,000.

District 4: Colorado, 10,500 against 9500; Montana, 23,000; Wyoming, 100,000.

District 5: California, 918,000.

Other than the increase asked in Texas, the only change in the natural gasoline and condensate estimates was a 250-barrel drop in California, where only 4800 barrels daily Paloma condensate production is looked for against 6200 barrels this month. The Texas estimate includes the regular 16,000 barrels daily of separator condensate over and above anticipated plant production.

Rates (in barrels) for the several states are: Pennsylvania, 1300; West Virginia, 6500; Illinois, 12,000; Kansas, 4300; Kentucky, 3200; Michigan, 700; Ohio, 600; Oklahoma, 28,000; Arkansas, 5200; Louisiana, 40,000; New Mexico, 4900; Texas, 160,000; Montana, 300; Wyoming, 3600; California, 58,560.

Texas April Allowable Tops PAW Certifications

The Texas Railroad Commission last week fixed a total allowable for April at 2,332,592 barrels of oil a day. This figure, which exceeds the PAW certification by 2592 barrels, includes 162,314 barrels of distillate and natural gasoline.

The commission reduced the Hawkins allowable from 40,313 to 37,193 barrels per day. Ellenburger wells in the Keystone field were raised from 5700 to 7600 barrels per day.

The commission order provided that fields generally including East Texas would produce 24 days during April with the Panhandle continuing to be exempt from shutdowns.

At the brief statewide hearing, few requests for allowable changes were received, although PAW had requested 10,000 barrels per day more from West Texas. The demand of 2,170,000 barrels of crude oil per day, received from PAW, was reflected in the nominations. However, these totaled 2,356,356 barrels, which is an increase of 21,258 barrels over March requests. The demand for West Texas oil was up 18,726 barrels.

The commission reported that the East Texas pressure had risen during February 3.35 pounds.

Crude Oil Production in the United States

(Estimates compiled by The OIL WEEKLY. All figures indicate daily averages, in barrels.)

STATE OR DISTRICT	PRODUCTION IN WEEK ENDED March 24	March 17
Alabama	250	250
Arkansas	80,300	81,200
California	912,250	905,800
Colorado	9,900	10,250
Florida	15	20
Illinois	191,600	182,400
Indiana	10,300	12,300
Kansas	275,500	271,300
Kentucky	14,200	27,250
Louisiana	365,750	366,250
North Louisiana	70,150	70,650
South Louisiana	295,600	295,600
Michigan	50,100	46,300
Mississippi	52,200	51,500
Missouri	100	100
Montana	24,500	22,705
Nebraska	950	950
New Mexico	104,750	104,750
New York	13,850	12,550
Ohio	7,450	5,550
Oklahoma	369,350	368,950
Pennsylvania	35,800	33,750
Tennessee	35	35
Texas	2,159,050	2,159,050
Upper Gulf Coast	564,500	564,500
East Texas Field	381,000	381,000
Rest of Eastern Texas	146,750	146,750
Lower Gulf Coast	249,700	249,700
Southwest Texas	81,400	81,400
South Central Texas	21,000	21,000
West Texas	477,350	477,350
North Texas	149,300	149,300
Panhandle	88,050	88,050
West Virginia	9,700	7,550
Wyoming	105,600	107,850
Total United States	*4,793,500	4,772,610

* New all time peak.

BUREAU OF MINES REPORT

Total stocks, foreign and domestic, March 10, as reported by the Bureau of Mines were: 219,486,000 barrels with a daily average production of 4,774,000; and runs to stills 4,773,000.

Rubber Plans Expanded as Situation Grows Critical

Further expansion of copolymer and raw material facilities costing in the neighborhood of $22,000,000 and bringing the investment in government-owned rubber plants to close to $750,000,000 will be necessary to meet the anticipated increased demand for synthetic rubber during the last half of this year and in 1946, it was disclosed last week in a 1944 year-end report of the Rubber Bureau released by the War Production Board.

Production of buna-S rubber last year totaled 668,834 long tons, and 1945 requirements are now placed at 881,000 tons and may be increased by reason of the expanded heavy tire program; 1946 requirements are now set at 1,054,000 tons, which is 22.5 percent over the present demonstrated capacity and 49.5 percent over the rated capacity of the plants.

"It is indeed fortunate that the synthetic rubber plants have demonstrated a flexibility in production and an ability to produce substantially over their rated capacity, so that with comparatively small additions an output up to nearly 50 percent over their rated capacity can be counted on for 1946 if needed," the report commented.

The most serious problems which the industry will face in its efforts to achieve 1945 and 1946 production goals are manpower, rayon and cotton tire cord, carbon black and beadwire.

J. F. Clark, director of the bureau, said increased production of tires and tubes represents the No. 1 war production problem, and the translation of the increased tire and tube program into crude and synthetic rubbers has again made crude rubber the most critical of all strategic materials.

WPB Chairman Krug announced that John L. Collyer, president of the B. F. Goodrich Company, had been appointed special director of rubber programs for a three-month period.

Tankers Withdrawn as East Coast Deliveries Hit Peak

An all-time record of 2,042,530 barrels daily of crude and products moved into District 1 during the week ended March 10, but the East Coast is being deprived of some of the facilities which made this possible, by new withdrawal of tankers to meet urgent military requirements overseas, it was reported by PAW March 22.

Announcement of the record deliveries was withheld temporarily by PAW so as not to cause over-optimism among the public, which might not realize that a very large part of the total represented military supplies to which it would not have excess.

"It is fortunate that the tank cars are again operating according to the programmed schedule, because once again we will have to depend on the tank cars, along with the pipe lines and the barges, to carry the brunt of the burden of supplying civilian as well as military demand along the Eastern Seaboard during the spring and summer months," Deputy Administrator Davies commented.

Important Texas Gas Conservation Bills Are Set for April 5 Hearing

On Thursday afternoon, April 5, the Texas Senate Oil and Gas Committee will hold a hearing on a bill by Senator Franklin Spears which would authorize the Texas Railroad Commission to order gas repressuring as a means of waste prevention. It is possible that a substitute, the bill sponsored by the Railroad Commission, (THE OIL WEEKLY, March 19, 1945) will be offered.

This committee last week approved Senator Wardlow Lane's bill to permit pooling the state's royalty interests. This bill was sponsored by the General Land Office to assure development of small tracts of state land in areas where wide spacing is the rule.

On April 4, the House Committee on Revenue and Taxation will hold a hearing on all gas tax bills and one providing for an increase in the tax on crude oil. This House committee last week approved the Celaya bill, creating a new oil and gas commission which would supplant the Texas Railroad Commission in this field. Most observers believed that this bill would make little progress on the floor of the House and that it would be defeated certainly if it ever comes up for a vote in the Senate.

On the afternoon of April 5, the House Oil and Gas Committee will take up pending gas proration and gas conservation bills which are pending before it. At this time, the Railroad Commission substitute will be offered and may be substituted for all of these bills.

It is expected that the gas transmission companies will oppose the ratable tax clause of this substitute because they interpret it as meaning that they may have to curtail production from some wells and then extend gathering lines to remote fields. Oil companies are supporting this bill.

Carbon Black Plant

Work will start within the next week on a $400,000 carbon black plant in the Hardin oil field, near Liberty, Texas. The plant will be owned and operated by Roxboro Steel Company of New York and will produce from 20,000 to 30,000 pounds of carbon black daily.

The Pony Lands in "One Hellish Place"

THE going has been hot and tough on Iwo Jima, as all the world knows by now. But THE OIL WEEKLY pony edition, sent free to overseas service men who formerly worked in the oil industry, effected a landing with the United States marines and then made the circle of its interested, if militarily busy readers.

Pfc. J. W. Timothy sent word under March 11 date, the letter arriving in Houston exactly 10 days later: "The fifth number of the Pony arrived, but in one hellish place on this island called Iwo Jima, where I am participating in operations. Have passed the issue around to a number of fellows in my outfit and we all have read with great interest the articles concerning new oil development. Thanks for the Pony and I hope more issues come our way. If they develop any better editions than THE OIL WEEKLY, then they have a large task ahead."

Gas Conservation Projects For Two Fields Approved

Two big projects for natural gas conservation, in Texas and Louisiana, respectively, may be indicative of a growing realization within the industry of the importance of eliminating waste, PAW officials said last week.

Priorities and preference ratings of AA-2 have been arranged for these projects, which together will cost close to $1,250,000 and result in the reinjection of huge quantities of gas back into the formation in two fields.

In the Old Ocean field in Brazoria County, Texas, it was disclosed, James Abercrombie and Magnolia Petroleum Company are associated in the installation of six 600-horsepower compressors, the project being estimated to cost in the neighborhood of $500,000, while Continental Oil Company contemplates an expenditure of approximately $700,000 in the construction of seven compressors of similar horsepower in the Ville Platte field in Evangeline Parish, Louisiana.

Top Priority Given Texas Crude En Route to Pacific

Tank-car shipments of West Texas crude to California refineries currently averaging 15,000 barrels daily with 20,000 barrels daily scheduled for April, are given top priority over rail movement from the Permian basin to the Middle West and East. This oil is loaded over The Atlantic Pipe Line Company's rack near Midland, Texas. The availability of tank cars governs the daily shipments. After the California requirements are fulfilled, 3000 to 4500 barrels daily of sweet crude from the Fullerton-Union area are dispatched to four small plants in Indiana, Ohio and Michigan. Approximately 14,200 barrels of mixed grade crude is shipped daily to Pittsburgh, Pennsylvania.

General Petroleum and Gilmore Consolidate

Consolidation of Gilmore Oil Company and General Petroleum Corporation, both of Los Angeles, California, has been announced, the consolidated organization to continue under the name and management of General Petroleum Corporation.

AAPG Business Meet Set This Week in Tulsa

The annual business meeting of The American Association of Petroleum Geologists will be held at the Hotel Mayo, Tulsa, March 27, with meetings of the executive committee scheduled for March 26 and March 28. Ira H. Cram, president of the AAPG, will preside at the morning session, March 27, and will deliver the presidential address entitled: "Resources and Resourcefulness." George S. Buchanan will preside at the annual business committee meeting. Reports of officers and of business and resolutions committees will be made at the afternoon session. J. P. D. Hull of Tulsa is business manager of the association.

The Sidney Powers Memorial Award will be presented to Wallace E. Pratt, director of Standard Oil Company (New Jersey) in recognition of distinguished and outstanding contributions to and achievement in petroleum geology. E. L. DeGolyer of Dallas, former AAPG president, will make the presentation Tuesday evening.

The president's award will be given to William Edwin Wallace, Jr., of Shreveport, Louisiana.

Wallace will be the first recipient of this award which was established in 1944, and was designed to "honor and reward the younger authors of original articles published in the *Bulletin* of the Association during each calendar year.

The award will be in two parts: a $100 cash award, and a certificate stating that Wallace's paper, "Structure of South Louisiana Deep Seated Domes," is a significant contribution to geology.

The selection committee, made up of ten Association members and two ex officio members, is headed by A. Rodger Denison of the Amerada Petroleum Corporation, and past president of the Association.

Shell to Study Actions of Fuels Under Jet-Combustion

Added evidence of the increased importance attached to jet propulsion is seen in the new fully-equipped laboratory recently built by Shell Oil Company at its Wood River refinery especially for the study of the actions that fuels undergo in jet-combustion.

In addition to surveying fuel requirements to determine characteristics and qualities of fuels most efficient for jet-combustion, work is also being done on experimental apparatus for further use in this type of research. This month at the new laboratory, latest findings in the field of fuels for jet propulsion and combustion turbines will be discussed by technologists from the Army, Navy, and other oil companies.

A jet burner, details of which remain a military secret, has been installed, and elaborate provisions made for complete study and recording of the effects of fuels. Ten 5000-barrel fuel tanks and a 1000-horsepower compressor have been installed to furnish fuel and compressed air.

The new laboratory is in addition to the fuel-testing laboratory installed at Wood River since 1927, which has contributed to the development of aviation fuels and special lubricants.

Synthetic Rubber's Contribution To Oil Field Operations

Petroleum industry's own customers make it possible to reduce over-all costs by use of special-purpose rubber, which has been found to be resistant to gas, acid, oil and heat.

By FRANK M. ANDREWS
General Sales Manager, Hycar Chemical Company, Akron, Ohio

GENERALLY recognized is the contribution of petroleum to the nation's synthetic rubber program, but it is not so well known that many of the oil industry's operations have been aided by synthetic rubber. Nor do oil men generally realize that their own customers have made it possible for the petroleum industry to reduce over-all costs by the use of synthetic rubber.

Just to mention one example, frequent replacement of tubing packers, well-head sealers and other tools for maintenance of a seal would be necessary if they were not made from oil-resistant synthetic rubber. This would mean leakage or expensive work to renew the seal every few months.

Oil-Resistant

The characteristics of special-purpose, butadiene—acrylo—nitrile synthetic rubber which make it especially suitable for the oil industry are its resistance to oil, gas, acid, heat and abrasion, plus its high tensile strength and good elongation. Wherever the term "synthetic rubber" is used in this paper, this special-purpose rubber is meant.

Oil drillers first discovered these qualities when they used synthetic rubber for blowout preventer ram packing. In quick order, the petroleum industry extended the use of the man-made petroleum-base product for tubing packers, mud valves (because of acidizing of wells), casing head packing and valve inserts.

An outstanding performance record by synthetic rubber was in a well drilled to more than 13,000 feet in a coastal area. This well had a tubing packer which employs two side-wall packers and a valve packer made from synthetic rubber. The tubing pressure was 5400 pounds. A temperature survey was run and 300 degrees Fahrenheit was recorded, although the actual temperature

Tubing packer equipped with six synthetic rubber rings effects seal between tubing and oil string, resists heat, oil and gas, and is easily pulled from well because of non-vulcanizing quality.

McEvoy

YOUR WELL OPENS AND CLOSES THE McEVOY GAS LIFT VALVE *Automatically*

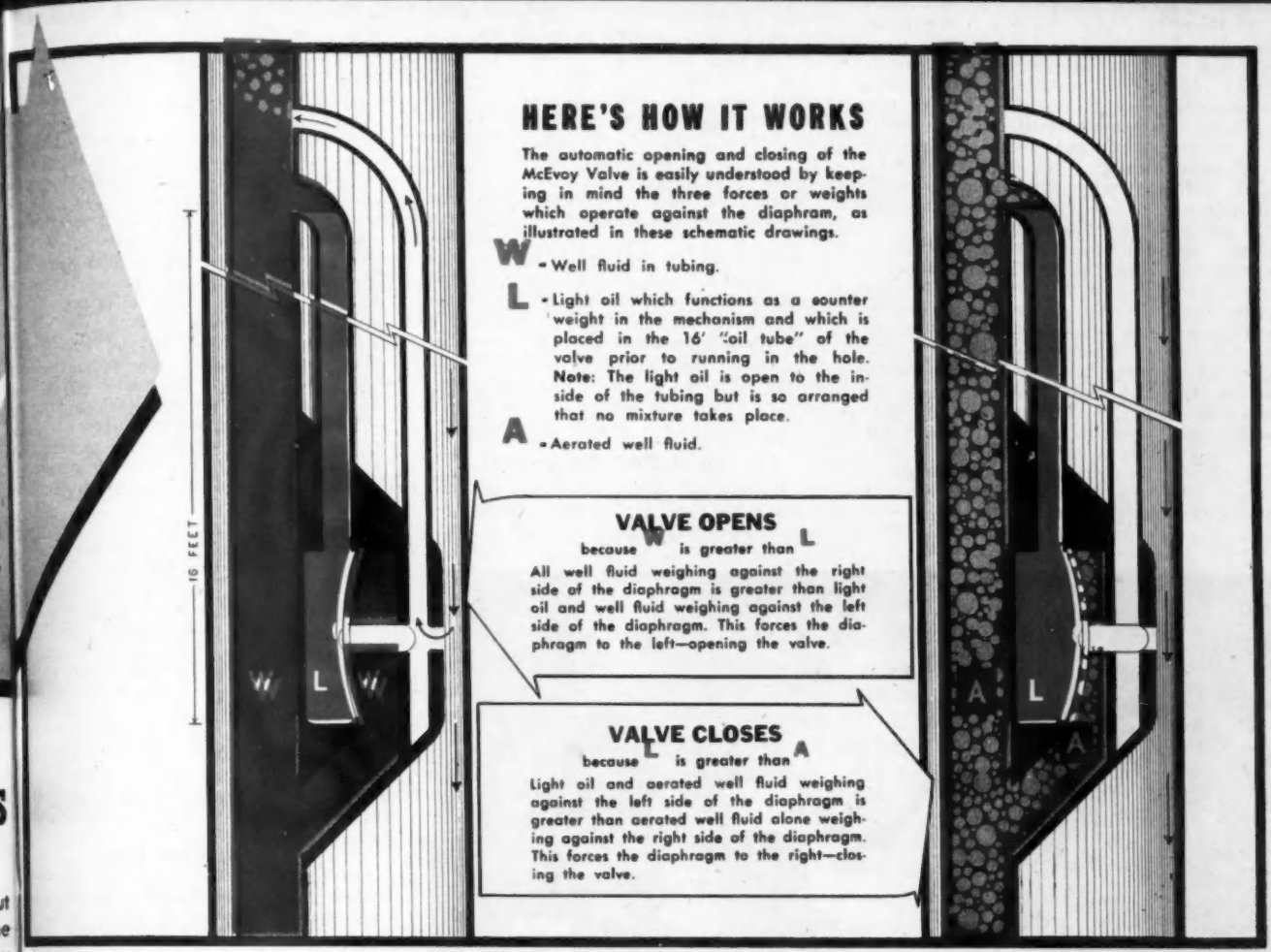
OPERATES LIKE A DIAPHRAGM CONTROLLED REGULATOR • SIMPLE AND POSITIVE!

18 in.
16 ft.
Lift is mounted on range No. 1 tubing
Arrows show path of gas flow.
Illustration at the left shows a phantom view of the valve at an angle.
Illustration at the right shows a vertical section of the same valve.
McEVOY GAS LIFTS made in OPEN FLOW AND INTERMITTER TYPES

GIVES YOU THESE ADVANTAGES

1. Well can be produced against a surface choke without decreasing the efficiency noticeably, because with the McEvoy Gas Lift, valves are **not** opened and closed by the differential between casing and tubing.
2. Gas is injected into the tubing steadily, which eliminates all surging action on the Christmas Tree. This type of flow is easy on connections and lease equipment.
3. Bottom hole troubles usually encountered, such as sanding up, etc., when producing a well by slug flowing are kept at an absolute minimum by the use of McEvoy Gas Lift Valves. The fluid is withdrawn from the producing formation at a constant rate, rather than in large slugs.
4. Valves can be spaced wider than any other automatic gas lift valve, which means less equipment in the hole.
5. No surface equipment is needed other than a means (usually a positive choke) of regulating the gas volume into casing annulus in the required volumes necessary to lift the well.
6. If it becomes necessary to kill the well, fluid can be circulated down the tubing with no back flow through McEvoy Gas Lift Valves, giving circulation to bottom.

Self Operating GAS LIFT



HERE'S HOW IT WORKS

The automatic opening and closing of the McEvoy Valve is easily understood by keeping in mind the three forces or weights which operate against the diaphram, as illustrated in these schematic drawings.

W - Well fluid in tubing.

L - Light oil which functions as a counter weight in the mechanism and which is placed in the 16' "oil tube" of the valve prior to running in the hole. **Note:** The light oil is open to the inside of the tubing but is so arranged that no mixture takes place.

A - Aerated well fluid.

VALVE OPENS

because W is greater than L

All well fluid weighing against the right side of the diaphragm is greater than light oil and well fluid weighing against the left side of the diaphragm. This forces the diaphragm to the left—opening the valve.

VALVE CLOSES

because L is greater than A

Light oil and aerated well fluid weighing against the left side of the diaphragm is greater than aerated well fluid alone weighing against the right side of the diaphragm. This forces the diaphragm to the right—closing the valve.

If a packer is set, valves unload easily, as all valves below fluid are open and the transfer through these valves is automatically created by the higher pressure being put on the casing annulus.

All bottom hole instruments, such as paraffin knives, bottom hole pressure bombs, etc., with the exception of a swab, can be run through McEvoy Gas Lift Valves. The tubing bore is not restricted in any way.

Lease man handles a well producing through McEvoy Gas Lift Valves just about as he does a flowing well. In fact, it is very hard to differentiate a well being produced through McEvoy Gas Lift Valves from a well flowing naturally.

10 McEvoy Gas Lift Valves take advantage of all lifting energy produced by formation gas. Should a well start to flow on its own, McEvoy Valves close.

Installations are available for all types of wells.

●

Hundreds of installations are in use by leading majors and independents throughout the oil industry.

Call us on your next gas lift problem.

Sold through all leading supply stores.

McEvoy COMPANY

TEXAS AND MILBY STREET
HOUSTON 1, TEXAS

is not known since the instrument broke when 300 degrees was reached.

Rubber Packings Hold

The well had to be reworked a year after it was drilled because the corrosive nature of the fluid produced had eaten holes in the tubing, but the synthetic rubber packings subjected to the fluid and heat were still making a complete seal.

These resilient products made especially for oil well purposes must be of a low-swelling character in order for the tools to operate efficiently and, in addition to their resistance to oil, they must withstand high gas pressure and acids. This indicates why synthetic rubber is standing up to tasks that natural rubber has not yet been able to perform.

One manufacturer overcame the difficulties presented by the action of drilling mud moving at high velocity on the mud line valve by designing his valve with a renewable flow-way insert or gate packer made from synthetic rubber. Its primary purpose is to create and maintain a perfect seal and to resist the abrasive action of the drilling fluid. When finally worn out, it may be replaced on the job for a few dollars. When delicate sealing surfaces in valves are damaged, repair costs are great as the valve must be removed from the line and shipped to a shop for repairs. The manufacturer's engineers selected synthetic rubber for this gate packer only after exhaustive tests convinced them that it is the best resilient material available for the application.

Its low swell when exposed to the oil and gas in the drilling fluid of a well caused the same material to be selected by another manufacturer for pack-off rubbers which provide the lip-seal on its fishing tools for drill pipe. Were this seal imperfect—from swelling or distorted rubber—the whole operation would fail. The fluid pumped down would simply flow out the bottom of the overshot, rather than help the operation by forcing the fluid up and around the outside of the stuck pipe.

Multi-zone well completion has come into widespread practice in the past year or two and that has created the need for a special casing head in surface operations. Special-purpose synthetic rubber has been employed in this equipment for the packing material in the stripper type pack-off and two hinged rings above the stripper. On completion of the well, these synthetic rubber products are constantly submerged in oil or dry gas or both.

Efficient in Dual Completions

Several dual wells have been completed in the Gulf Coast field where synthetic rubber packing material must separate dry gas under 3800 pounds pressure per square inch—the top of the packing being exposed to the gas and the lower portion to distillate.

Engineers for both the manufacturer of the packing material and the equipment manufacturer using the packing are confident that it will furnish an effective seal for the life of the well under conditions which would be ruinous to natural rubber.

Leak-proof sealing of oil wells puts the tubing and casing to the test of holding against oil and gas pressures sometimes reaching 5000 pounds per square inch. Engineers responsible for designing equipment to do this have specified synthetic rubber for the sealing material in ram-type tubing heads and casing heads.

A hook wall control head packer in general use in the Gulf Coast area employs six synthetic rubber packer rings which are compressed to effect a seal between the tubing and the oil string by imposing the weight of the tubing string on the packer mandrel after the slips have engaged the inside wall of the oil string. This positive sealing action seldom fails to provide a pressure-tight shut-off, thus relieving the oil string of dangerously high bottom hole pressures by confining them to the relatively safe tubing string.

The contribution of special purpose synthetic rubber to this operation is demonstrated in the fact that the packers maintain the seal indefinitely under high bottom hole temperatures and while constantly exposed to oil and gas.

Frequently it is necessary to pull the packer from the well. Should the packer material swell badly or adhere or bond itself to the wall of the casing, it would prevent removal and result in costly remedial operations. The non-adhering and low swell qualities of synthetic rubber permit removal without this difficulty and make it particularly applicable.

Oil-Resistant Hose

The cited applications for synthetic rubber in the petroleum industry illustrate why it is proving of practical assistance, but by no means is this a catalog of all possible usages. In handling petroleum products, oil-resistant hose made from synthetic rubber is in general use. Machinery around oil wells and refineries uses gaskets, drive belts and other mechanical products made from this special-purpose synthetic rubber. This synthetic rubber also is used for machine mountings where vibration must be eliminated, as a binder for abrasive wheels and for industrial truck tires in factories where oily floors are present.

The versatility of this petroleum base synthetic rubber is due to the fact that different types are being manufactured to give special characteristics while nature produces its rubber consistently of the same type. Further, these different types of crude synthetic rubber can be compounded to obtain tremendous differences in hardness, heat resistance, cold resistance and the other qualities that are required.

Big strides have been made in the development of synthetic rubber during the war and these advances will not stop in the postwar period. The petroleum industry can expect that special-purpose synthetic rubber will not only become increasingly useful in its production efforts but will be a practical and economical factor in widening petroleum markets.

Arrows point to packing material made from synthetic rubber used in special casing head for multi-zone well completion.

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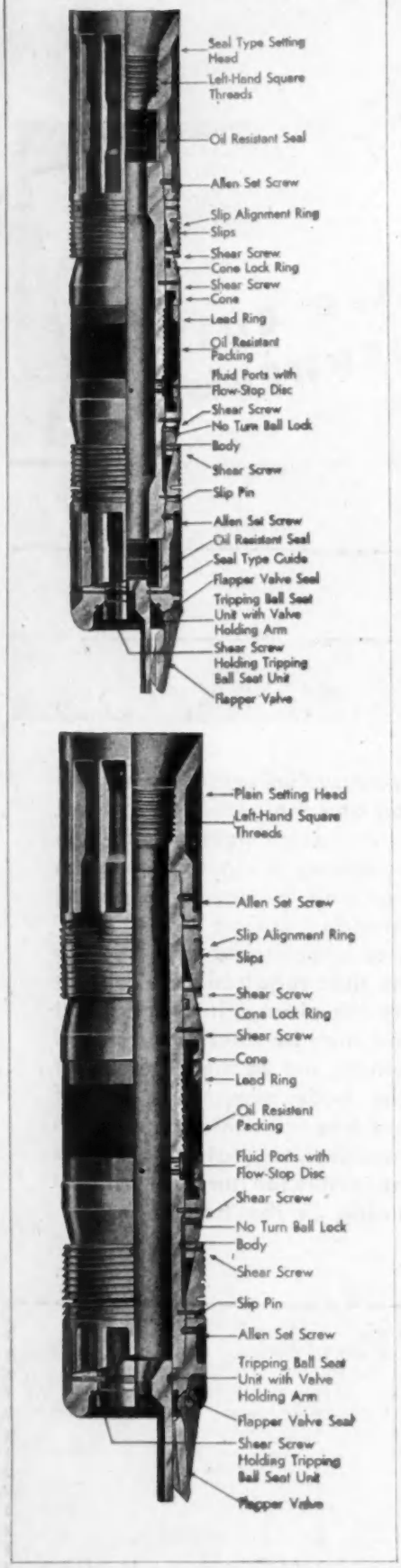
Retainer Production Packers Used In Corroded Casing String Repair

By COURTNEY J. BERLIN, Baker Oil Tools, Inc.



Above—Retainer production packer, continuous double seal type. Below—Retainer production packer, packing head seal type.

DURING 1942, it was found necessary to rework practically all the wells in the Magnolia field, in Arkansas, to combat the excessive corrosive action which was seriously damaging the casing in the well. The corrosive action was due to hydrogen sulphide-bearing gas in wells producing from the Smackover limestone formation. The reworking of the wells in this pool was begun after it was found that 23 of the 107 flowing wells had leaks of considerable size in the oil strings. Packers were set in the casing above the producing zone to confine the production in the tubing, and to isolate the casing from the offending hydrogen sulphide-bearing gas.

To insure isolation of the casing from the corrosive fluids or gases, the annular space between the casing and the tubing was filled with mud or oil. Some operators filled this annular space with 10-pound per gallon mud having a viscosity of 26 to 30 seconds. In some instances, a low grade fuel oil was used. An oil base mud was also used for this purpose. It was made according to the following specifications:

> 5½-degree API Bunker "C" Oil and 35-degree API Gas-Oil blended to 32 seconds Saybolt, and having 11-degree API gravity and specific gravity of 1.0 at 122°F. One barrel of the oil base mud with a weight of 10 pounds per gallon was composed of the following ingredients: 0.9 barrel of this blended mud; 60 pounds of borium sulphate material for weight; 40 pounds of lithopone type "LCLR" as a suspension agent; and 22 pounds of carbon black for gel strength.

Of the 107 flowing wells in this field, 82 were equipped with retainer production packers. These packers were set in the casing above the producing zone, to provide the seal between the tubing and the casing. Retainer production packers were chosen because:

1. They are anchored against upward and downward movement by means of two full sets of slip segments.

2. Tubing is independent of the packer and may be easily removed from the well.

3. Set down weight is not required, so tubing hangs freely, and straight, in tension.

4. They are made of cast iron, which is more resistant to corrosion than the steel casing in which they are set.

5. They are drillable, providing positive removal without the hazard of long and costly packer fishing jobs.

6. They are adaptable to all well conditions and operating procedures.

Retainer production packers are of one basic design, but are made in two types. Both types were used in the Magnolia field. Choice of type depended on well conditions, accessory equipment used, operating procedure, and operators requirements.

In the continuous double seal type retainer production packer, the seals which seal off between the bore of the packer and the outside of the tubing are mounted in the bore of the packer, and are integral parts thereof.

A polished joint of tubing, free of all burrs and sharp edges, is run through this type of packer. The seals inside the packer will form a fluid tight seal with any part of the polished joint of tubing.

The second is the packing head seal type retainer production packer. This packer has a smooth, accurately machined, internal bore and does not have any tubing seals built into the packer. Seals molded onto short tubing nipples are placed in the tubing string such that the seals will be positioned in the smooth bore of the packer, to form the closure between the tubing and the packer. The tubing seal nipples are a part of the tubing string, and any time the tubing is pulled, these tubing seal nipples can be renewed if the seals show appreciable wear.

The clearance between the bore of the retainer production packer and the tubing is kept very small, about 1/64-inch, in order to confine the tubing seals. This is done in order to prevent any tendency of the seals to flow under extreme operating conditions.

In some wells in the Magnolia field, it was necessary to pull and repair the upper, corroded, portion of the oil strings. In this case, the retainer production packer was set in the casing, and the flapper valve on the bottom of the packer held in the bottom hole pressure. The upper portion of the casing, about 3200 feet, was pulled and repaired. It was then run in and cemented, after which the well was brought in, in the usual manner, with the tubing extending through the packer.

During the reworking and completions in other fields in southern Arkansas, dual completions were made in which the lower zone is produced through the tubing and an upper zone is produced in the annular space between the tubing and the casing. Both types of retainer production packers were used, depending on well conditions and operators' requirements as to types of accessory packer equipment. The original design and development of retainer production packers pioneered and made possible the present widespread practice of making multiple well completions wherever field conditions permit.

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Wall Trap Door and Haul-Away Bin Streamline Shop Salvage

Time-saving device enables companies to cut down on salvage costs and keep shop floors relatively clear

ANY time-saving kink that will help to lift the maintenance or salvage department out of the red is more than welcome to large companies which expect to subsidize that department. This is particularly true in these days, in the interest of conservation of otherwise unobtainable critical materials. An ingenious means of saving many man-hours is employed in the maintenance department of one of the major companies where a means of disposing of rapidly-accumulating pipe scrap in the shop is accomplished in one simple, time-saving operation.

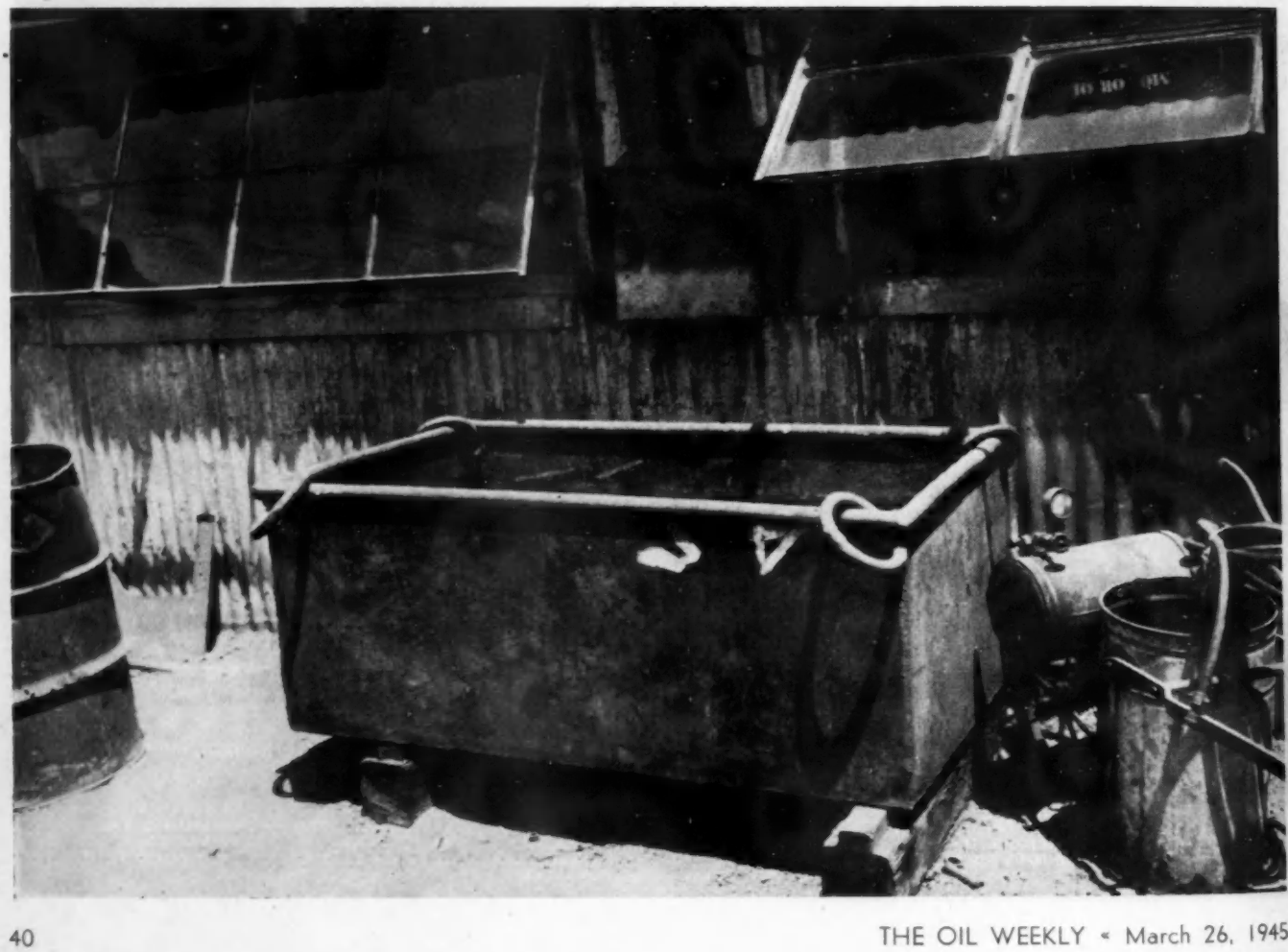
One side of the shop building is devoted to benches and tools where rusted and partly-destroyed fittings are broken down for salvage. Since a large part of the materials broken out must be discarded as junk, the problem of continually moving large bins filled with fittings out of the building would amount to quite an undertaking. A rectangular opening some 18 inches square was cut in the side of the building midway between work benches and shop machines. Cased as a window would be, but with the addition of a 6-inch deep chute sloping downward and outward, the opening was covered on the outside by a light steel door, hinged at the top so it will swing outward. The inner side of this trap door was covered with a panel of rubber-surfaced belting, and the heavy hinge was made to extend across the width of the door to enable it to better withstand the sharp impacts of steel fittings thrown at it. Workmen inside at the benches, on breaking out a piece of material to be junked, merely toss it against this door which immediately flies open, allowing the materials to fall outside and into a large rectangular steel bin placed against the side of the building. The trap door is hinged and balanced so that immediately after the fitting passes beyond, the door will close and hang flat against the side of the casement, thus maintaining a relatively effective seal against the weather.

Special Haul-Away Bins

The design of the scrap bin is no small part of this arrangement. It is of all-welded construction, the upper edge being reinforced with a stiffening rim of 1-inch pipe material. To each corner is attached a large, heavy steel ring that is looped through a hole cut in the bin siding below the rim reinforcement, and with which the bin easily may be hoisted upon the bed of a crane-equipped truck using a 4-hook sling. The rings also facilitate dumping of the contents at the junk pile and the container can be returned quickly to its position beside the shop.

An important result of this system, other than that of the time saved, is the matter of space conservation in the shops. Ordinarily a pile of scrap, in such a shop of a large company having a high turn-over of equipment and fittings, accumulates so fast that working efficiency soon would be impaired. The cost of installing this trap door is inconsequential compared with the overall saving and improved working conditions that result.

Below—This recess in the shop wall, covered by a hinged flap which automatically swings open when scrap is placed in the chute, provides for handling scrap to the transfer box below which, equipped with lifting rings, serves to collect waste metal and then to transfer it to the sorting floor, or to deliver it directly into a truck, if the material is known to be of no further use at the shop.



SIMPLICITY IS THE FIRST REQUISITE OF SAFETY

Look for the weight that isn't there!

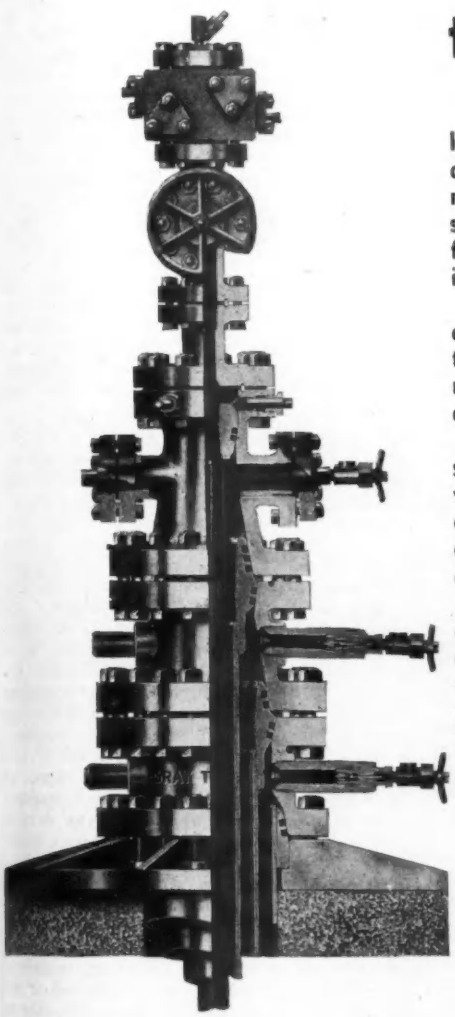


FIGURE 1A

Complete Well Head Assembly equipped with Composite Manifold, Valve Removal, Installation and Removal.

Only through the proper application of the axiom, "more strength with less weight," is it possible to make quality and economy meet. When a designer attains "more strength with less weight," he has provided the only means by which increased quality at reasonable cost is possible. "More strength with less weight" is usually attained through simplification, the first requisite of safety. Simplification usually attained through a reduction in parts proportionately reduces the hazards—the chances for trouble.

The removal of master valves, blowout preventers, flow line valves, and each and every part at the time it completes its control function removes top-heavy, cumbersome assemblies which, like the Tower of Babel, would, unless tied together with most expensive clamping mechanisms, topple over or vibrate to pieces of their own weight.

The basic canon of the science of hydraulics is the reduction of pressure subject areas. Natural physical laws apply this principle in a completed oil well in that as greater depths encounter higher pressures, the size of the casing is reduced. Obviously, consistency demands that this same reduction of pressure subject areas be carried into the manifold assemblies at the top of the well.

The Gray Composite Manifold is a typical example of simplification and concentration of control, for it is a Christmas Tree and flow line manifold all in one. This Gray Composite Manifold contains four valves and two chokes—all removable—replaces 28 separate parts in the conventional tree, gives 345 lbs. of concentrated control as against conventional trees weighing from 600 to 3000 lbs.

Gray Systems of Well Control attain the highest degree of simplification through practicing the principle of "more strength with less weight."

The whole is greater than any of its parts.
Look for the weight that isn't there!

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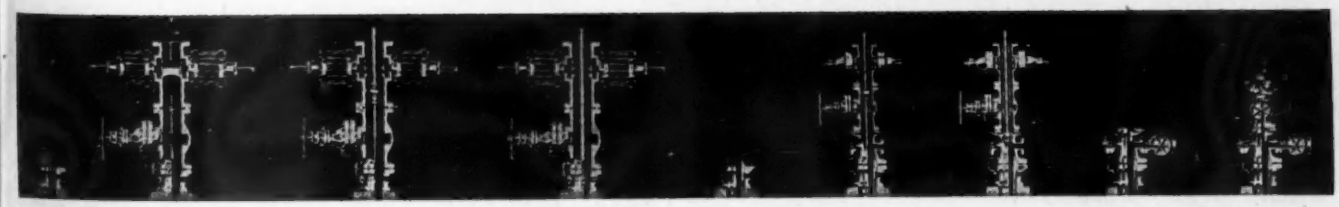

Casing Head Attached | Drilling | Running Casing | Casing Landed | Drilling Control Equipment Removed | Drilling-in and Running Tubing | Tubing Landed | Control Equipment Removed | Manifold Attached

Tax Review

A Regular Feature of THE OIL WEEKLY
By WILLIAM O. TAYLOR*

This column is designed to review legislation, judicial decisions, administrative rulings and policies, and topics which are of current interest to the oil industry, from a tax viewpoint. It will be published as frequently as new developments seem to require.

Recent Decision of U. S. Circuit Court Hardest Blow Tax-Wise of Oil Industry

IF THE decision in the *F.H.E. Oil Company* case, handed down by the Fifth Circuit Court on March 6, is allowed to stand, the oil producing industry will have suffered its hardest blow tax-wise in its entire history. The crushing effect of the decision will be too much for many small and medium-sized units in the industry; it will hamper the efforts of the entire industry to a great degree—just how great no man can yet foretell.

The case began innocently enough in the Tax Court. F.H.E. Oil Company acquired a number of leases, in most of which it was provided that the lease would terminate unless drilling was begun in a relatively short period. Drilling could not be delayed by rental payments. In one lease, the company firmly obligated itself to drill. The government took the position that none of the drilling costs could be deducted for income tax purposes, since the drilling of the wells was consideration for the leases. This was the familiar "acquisition well" rule (see "Tax Review" in Oil Weekly, January 1, 1945), and the facts were such that decisions in prior cases, particularly *Hassie Hunt v. Commissioner*, 135 F. (2d) 697, seemed to point to a decision favorable to the government. Such was the case, but four judges dissented and there was reason to hope that the ill-considered "acquisition well" rule had been extended about as far as the judicial mind would permit.

Option Called Invalid

The case was appealed to the Fifth Circuit Court and its earth-shaking decision of March 6, stated brutally and briefly, was this: *The regulations under which tax payers are given an option as to treatment of drilling costs are invalid, and the cost of drilling a productive well cannot be charged to expense under any circumstances.* Such costs said the court, must be capitalized and recovered over a period of years through depletion allowances. It is understood that the government, on appeal, did not urge the invalidity of the regulations, confining its argument to the applicability of the "acquisition well" rule. The court, apparently on its own motion, placed its decision on the broader ground.

The blow did not fall entirely without warning. The decision was written by Judge Sibley who, in a concurring opinion in the *Hassie Hunt* case, decided on May 17, 1943, said that the statute did not seem to authorize the option which the regulations provided. However, he agreed that certain drilling costs therein involved should be allowed as deductions "because the decided cases require it." He has apparently changed his mind as to what prior cases require. The majority opinion in the *Hunt* case affirmed a Tax Court opinion that other drilling costs in the case could not be deducted, but only because they were governed by the "acquisition well" rule and not because the entire regulation with respect to drilling costs was invalid. Judge Holmes, who was with the majority in the *Hunt* case, did not take part in the *F.H.E.* decision. Judge Waller, who was also with the majority in the *Hunt* case, wrote a concurring opinion in the *F.H.E.* case which indicates he approves the decision but not the broad ground on which the question was decided.

Rehearing Sought

A rehearing before the Fifth Circuit will be sought and if it is denied the case will surely be carried to the Supreme Court. There has been considerable speculation whether the Supreme Court will hear the case on its merits. Ordinarily it will do so if there is a conflicting decision in another Circuit Court on the question involved. In this connection, the Fifth Circuit took note of the case of *Ramsey v. Commissioner*, 66 F. (2d) 316 and, while admitting that the regulations were approved in that case, pointed out that the *Ramsey* case involved regulations issued under statutory provisions which allowed discovery depletion rather than percentage depletion as first allowed by the Revenue Act of 1926. However, the Supreme Court has held in *U. S. v. Dakota-Montana Oil Company*, 288 U. S. 459, that the percentage depletion provisions were intended to cover exactly the same things as the earlier discovery depletion provisions, so that it is doubtful whether the *Ramsey* case can be distinguished from the *F.H.E.* case on that ground. It is believed that the *Ramsey* case is directly in conflict with the *F.H.E.* decision and that the Supreme Court will hear the latter.

The outcome of the case will hinge upon the question of whether the regulation has the force and effect of law by reason of Congressional approval. It is well settled that where a statute is interpreted by regulations over a considerable period of time during which the statute has been re-enacted without any change in the provisions to which the regulations relate, Congress is deemed to have approved the interpretation contained in the regulation and to have intended that the statute have that meaning. The government will urge another rule of statutory construction to the effect that a regulation which clearly controvenes the statute is void, regardless of re-enactment of the statute. Within that rather narrow legal arena will be fought one of the most momentous battles with which the oil industry has ever been concerned.

Long Standing

The regulation has been in effect more than a quarter of a century. The statute which it construes has been re-enacted many times without any change remotely indicating Congressional disapproval of its interpretation. Although the statute itself has never provided in so many words that drilling costs may be deducted, there have been at least two instances where statutory provisions have unequivocally recognized the fact that the law has been so interpreted. One of them, Sec. 711(f) (1) (I) of the Internal Revenue Code, is still on the statute books and provides for certain adjustments with respect to the excess profits tax in the case of "deductions attributable to intangible drilling and development costs paid or incurred in or for the drilling of wells or the preparation of wells for the production of oil or gas...", where such costs were abnormally large during certain years. The above language was taken practically intact from the very regulation which the Fifth Circuit has said is invalid and which the government may be expected to argue has not been approved by Congress. If this regulation has not had Congressional approval, it is extremely difficult to imagine just how such approval is to be made manifest.

It can be forcefully argued that the Supreme Court approved the option with respect to drilling costs in the *Dakota-Montana* case, despite the Fifth Circuit's opinion that such was not the case. The tax payer there had capitalized drilling costs instead of expensing them and claimed that they were returnable through depreciation rather than depletion. The government relied on Article 223 of Regulations 69 which provided in the same sentence that taxpayers should have the option and that, if they elected to capitalize drilling costs, such costs should be returned through depletion. The taxpayer argued that these regulations were invalid *since they could not change the character of drilling costs, which* (said the taxpayer) *were in reality and in fact capital investments and not current expenses,* exactly what the Fifth Circuit now says. The Supreme Court declined to accept the taxpayer's argument and, expressly refusing to consider whether from any other viewpoint it might be said that drilling costs are returnable through depletion, sustained the government solely on the ground of the validity of the regulation. It is seriously to be doubted that the Supreme Court considered itself as approving part of a sentence while ignoring the rest of it, when the whole so obviously was intended to cover, in its entirety, the question of treatment of drilling costs.

Frequent Tacit Approval

The option feature of the regulation has received at least tacit approval in many cases. For instance, in *Helvering v. Wilshire Oil Company, Inc.*, 308 U. S. 90, the taxpayer contended that a change made by the government in another regulation operated unfairly to it because of the binding effect of its prior election to expense its drilling costs. The Supreme Court said that the taxpayer, in making the election which the regulations provided, must "take such burdens as may flow from its election along with the benefits." The binding

* The author is an attorney associated with the firm of Butler and Binion, Houston.

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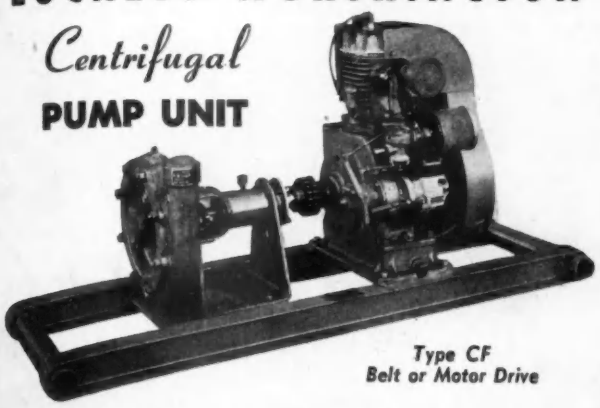

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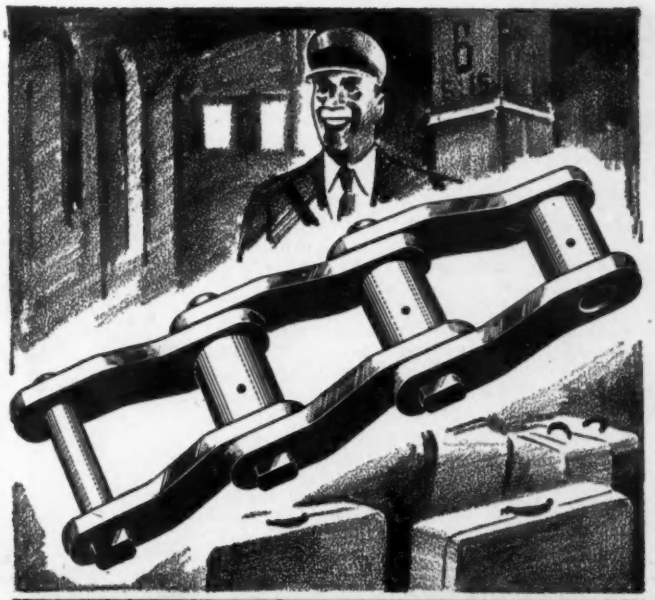

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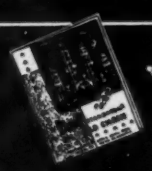

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UNION CHAINS

nature of the election, with the consequences so indicated, presupposes the validity of the regulation which grants it.

Apart from what the cases have said and judicial notions which have come to be recognized as rules of construction, the oil industry has suffered a drastic blow which it eminently does not deserve. For a quarter century, the government's own rule has made the option available. The capital structure of units within the industry has been greatly influenced by the desirability of ploughing back earnings in the form of further development rather than paying out dividends. Programs of debt amortization have been planned and commitments made on the assumption that the option would continue to be available. Development programs have been begun with budgets which do not include the crushing and inequitable tax burden which the decision would fasten on the industry It is undoubtedly a fact that the inter-relation of drilling costs and tax outlay has been at least as important as any other single factor in determining what the oil business is, what it has, how it operates, how much it has benefited America and Americans, and how able it will be to meet the problems which lie ahead.

Comes at Worst Time

The blow just couldn't have come at a worse time. Over a period of several years during which operating costs have gone up and up, oil prices have been clamped down with a rigidity which has made the Little Steel formula look like a rubber band. Nonetheless, the industry's oil reserves have been gutted to furnish a flood of oil on which Allied arms are surging to victory. Already there appear challenges to American supremacy in oil in the postwar world—from huge oil reserves in foreign lands controlled through cartel arrangements backed by foreign governments which may not feel as charitable toward America after lend-lease stops as they now do. It will require the best that there is in the American oil industry to throw off the effects of its prodigious war effort and rise to meet this challenge. To change the rules of the game now is a blow below the belt. In the courts—or in Congress—the situation must be corrected.

☆ ☆ ☆

Excess Transportation and Stripper Costs Disclosed

Defense Supply Corporation's absorption of excess transportation costs on crude and products has amounted to $301,345,000 since the program was initiated August 1, 1942, and will require a monthly expenditure of $11,000,000 through the year beginning July 1, next, while $11,301,000 has been paid out since August 1, 1944, in stripper well subsidies, which will cost $4,500,000 a month to maintain, according to figures submitted to a House appropriation subcommittee.

DSC income up to December 31, last, a balance sheet prepared for the subcommittee showed, included $294,172,000 received under the plan for the equitable sharing of revenues and extra transportation expenses, $4,967,000 in reimbursement of loss on aviation gasoline, $77,340 in profit from alkylate operations in aviation gasoline and $183,755 profit on exchange of gasoline.

Rubber Reserve Company showed that losses due to enemy action cost $6,653,750.

Saturday Night in Burma

Members of an infantry unit of the British 14th Army fighting the Japs between Shwebo and Mandalay in Burma are shown enjoying a bath in tubs made from gasoline drums during a brief stop at Sadaung. The tubs, along with soap and hot water, are supplied troops in the front line area by a mobile unit. The tubs are named after favorite motion picture stars.
—International News Photo from British Official

Chemistry Institute Award To Thomas Set for May 11

Chemistry's ever-increasing importance to the winning of the war will be discussed at the May 11 medal meeting of American Institute of Chemists in Columbia, Ohio.

The recipient of the 1944 Gold Medal Award is John W. Thomas, chairman and chief executive of Firestone Tire & Rubber Company and former chief chemist.

The award is in recognition of his executive ability in translating research results into large-scale production, which was a major aid in the development of America's giant wartime synthetic rubber industry.

The award will be made by Dr. Gustav Egloff, president of the Institute.

Correction

In the discussion of the Texas gas regulatory bill published in THE OIL WEEKLY March 12, reference was made to Dr. E. A. Stephenson "of the University of Missouri School of Mines." This was in error as Dr. Stephenson has, since 1937 been head of the department of petroleum engineering, University of Kansas, at Lawrence.

Petroleum's Warm Message to Tokyo

Successful incendiary raids on Tokyo, Nagoya and Osaka—the first three of many Japanese industrial centers scheduled to receive B-29 Superfortress attention were made possible by petroleum industry know-how, it was disclosed last week by Standard Oil Company (New Jersey), whose personnel was loaned to the Army chemical warfare service to aid in development of the unquenchable bomb which burned out large sections of those cities.

The "M-69" oil incendiary bomb, demonstrated publicly last June at the company's proving grounds in Bayway, New Jersey, contains jellied gasoline which is forcibly scattered upon impact in gobs of sticky flaming material which clings to the sides of buildings or spreads inside them if the roof is pierced. The bomb can be dropped in aimable clusters.

The M-69 looks like a piece of hexagonal pipe, it is cut off square at the ends and has no fins. It receives its stability from cloth streamers which come out when the bomb falls free. The streamers slow the fall of the bomb to a speed which gives it adequate power to pierce a roof without damaging its internal mechanism. Dropped in clusters, the bombs scatter as they fall earthward.

The bomb is equipped with an inertia fuse and a powder train that ignites an explosive mixture which hurls a cheesecloth sack of 2½ pounds of jellied gasoline out of the tail of the metal container with enough force to smash the bag and scatter flaming "goo" against a building as much as 100 feet away from where it falls.

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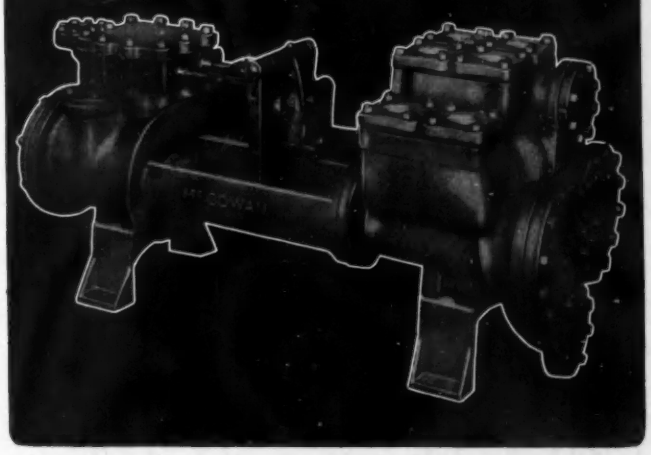

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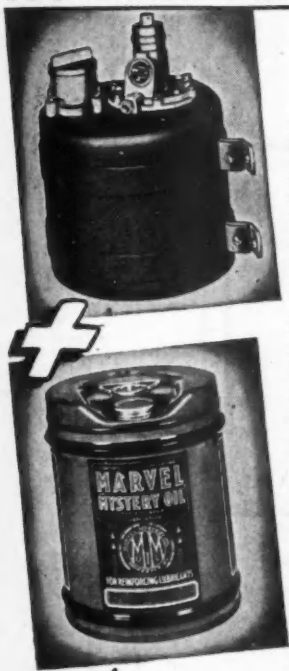

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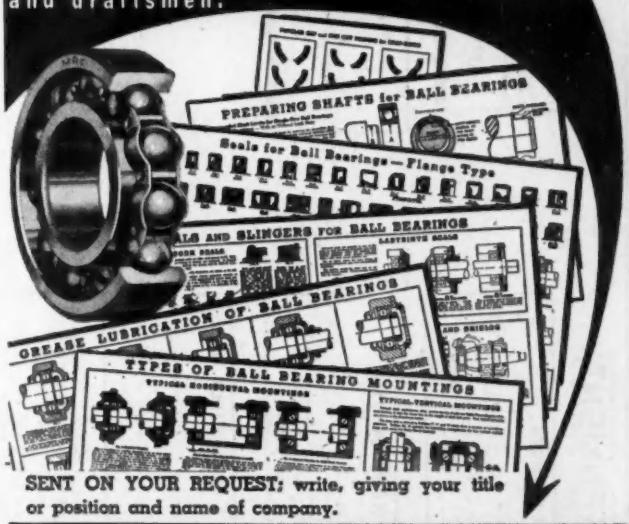
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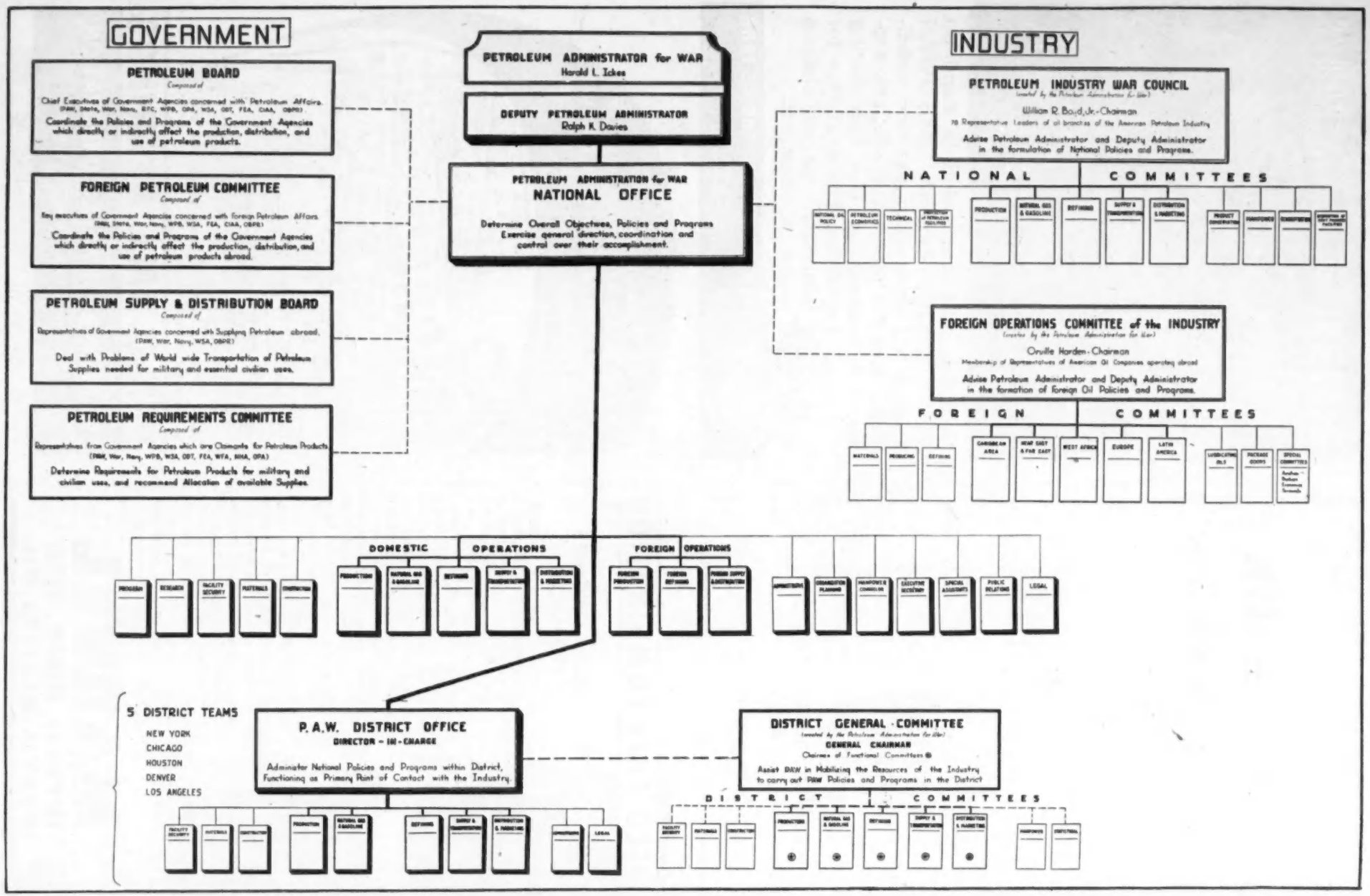
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Coordinate the Policies and Programs of the Government Agencies which directly or indirectly affect the production, distribution, and use of petroleum products.
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DOMESTIC OPERATIONS
FOREIGN OPERATIONS
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DISTRICT COMMITTEES

Petroleum war team. Chart shows parallel organization of industry committees matching the functional divisions of PAW, resulting in unequaled cooperation between industry and government.

Success and experience of PAW called an outstanding achievement of the conception and execution of an ideal industry-government partnership. Many influences cited in transportation, refining, production, marketing

Permanent Benefits from Wartime Regulations

By DUDLEY CORNELL, District 3 Counsel
Petroleum Administration for War, Houston, Texas

This article represents the personal opinions and observations of the author. It is not an official release of PAW, and therefore does not necessarily represent PAW's official viewpoint.

THE war has changed many of the operating patterns and normal activities of the petroleum industry. For various reasons, it has been necessary to retard some activities, to change others completely and to expand others far beyond normal rates. Wartime conditions have simply but absolutely determined the character and scale of all the industry's operations. It is natural that the domination of a great industry for such a length of time by these wartime regulations will leave some lasting scars and effects. Despite some criticism and complaining of hardships, not all of these will be bad; and the industry should look at the other side of the ledger to determine whether there may not also be some permanent benefits to be recorded.

It is not proposed to attempt a history of oil wartime regulations or achievements. Such a history is inextricably woven into the glorious record of this war. This is an attempt rather to evaluate the impact of wartime regulations and conditions upon the petroleum industry whether any permanent influences or changes may result from them.

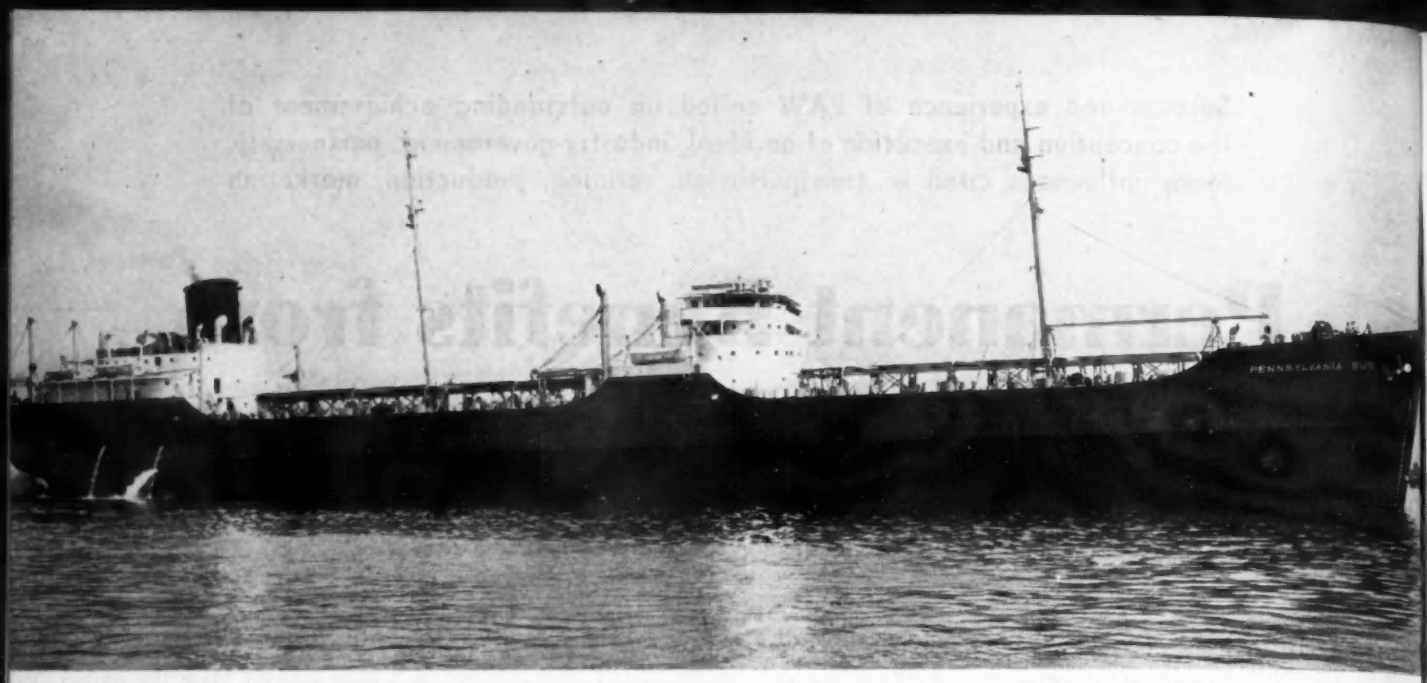
Most of the changes have developed under the sponsorship and direction of the Petroleum Administration for War. This government wartime agency has dominated the petroleum picture for the past three years, and undoubtedly will continue to do so as long as the war lasts. It is not intended to attribute solely to PAW the credit or responsibility for many things which were of necessity the result of joint action and collaboration with other government departments such as Defense Plant Corporation, Defense Supplies Corporation, Rubber Reserve Corporation and others. Neither is it intended to convey the idea that the industry itself is not due much of the credit. All is well known, the petroleum industry furnished the manpower that staffed PAW. In addition, the industry has cooperated full-heartedly. The purpose here is not so much to give credit, but to consider the influence of some programs that may leave a lasting imprint upon the industry.

In looking for permanent effects it is not meant to search for orders or directives that might be made permanent by law. Instead, it is assumed that the slate will be wiped clean by the dis-

The nation's oil transportation system has been completely revamped during the war, a change made necessary by the lack of tankers to move oil from the Southwest to the Atlantic Seaboard. Shown here is the Big Inch pipe line under construction through Pennsylvania mountains.. It is only a small portion of the nearly 10,000 miles of new pipe line constructed since Pearl Harbor. The Big Inch has been mentioned as a possible gas carrier after the war.

Petroleum war team. Chart shows parallel organization of industry committees matching the functional divisions of PAW, resulting in adequate cooperation between industry and

, 1945



Wartime construction has doubled the number of tankers with 586 built since 1940, each defense-type tanker the equivalent of 2 pre-war vessels through increases in speed and capacity.

solution of PAW and the revocation of all restrictive orders at the earliest possible moment, consistent with war demands. Under such conditions, an attempt is made to consider whether some of the policies, programs, orders or directives may not have made a lasting impression upon the petroleum industry and even upon the people as a whole.

Petroleum Transportation

The transportation of petroleum is one of the industry's operations that likely will be influenced permanently by wartime operations. Not only have pipeline facilities been expanded greatly, but the direction of flow has been shifted by the necessity of moving petroleum overland to the East Coast instead of shipping it by tanker from the Gulf Coast as in prewar days. The United States tanker fleet has been doubled in size. Thus, the two principal means of moving petroleum have been expanded far beyond prewar dreams or needs. These should mean cheap transportation costs and flexible operations for many years to come.

PAW has sponsored 33 pipe-line projects in all, involving $168,085,000 of government funds, and $117,125,242 of industry money, or a total of $285,210,242. These include 9641 miles of new pipe line construction, and 3753 miles of reversal and conversion.

Many of these structures will be lasting and permanent. They will have a visible influence upon the economy of petroleum distribution. Most prominent of the PAW pipe line projects has been the Big Inch and the Little Big Inch pipe lines from Texas to the Atlantic Seaboard. They are currently transporting 536,000 barrels (December average) daily from Texas to the New York area, and are operating at a pipe line cost never before achieved.

The Defense Supplies Corporation reports (THE OIL WEEKLY, November 20, 1944) that the total operating cost of these pipe lines, including interest and amortization, is 38 cents per barrel on transporting crude oil from Texas to New York and 24.3 cents a barrel for transporting refined products from the Gulf Coast to New York. Jesse Jones' figures indicate that the pipe lines are making a profit of $100,000 per day. On the basis of present figures, the lines could be competitive with tankers in the postwar era, if a sufficiently high load factor could be maintained.

Thus, we have a permanent construction, a permanent gain in the economy of transporting oil. A vital segment of the petroleum industry has been altered in its basic relationships.

It has been suggested that both lines be converted to the transportation of gas, and this is supported by the certainty of sufficient tankers to handle the oil movement to the Atlantic Seaboard. If this should happen, then the natural gas industry will receive a postwar boost. In spite of the foregoing claims, some transportation experts still maintain that these pipe lines will not be competitive on a cost basis with tanker transportation to the East Coast.

This whole problem is coupled with the fact that wartime construction has more than doubled the number of tankers, in addition to the fact that the new tankers have increased capacities of 40 percent and increased speeds of 40 to 50 percent. Five hundred and eighty-six of the defense type vessels have been built since 1940, and each one is the equivalent of two pre-war tankers (Oil & Gas Journal, November 18, 1944). There can be no doubt tha the tanker capacity is sufficient to meet world-wide demand in the postwar period, and at the same time figure largely in the movement of oil to the East Coast, if these two large pipe lines should be otherwise employed.

100 Octane Plants

Perhaps the most amazing and successful project of the entire record of PAW and industry has been the construction and operation of 100-octane plants to produce the superfuel to power our bombers and fighter planes. On October 15, 1944, PAW Deputy Administrator Davies announced (Release PAW 547) that the United Nations were producing 500,000 barrels daily of 100-octane aviation fuel. Such an increase in productive capacity of high-octane gasoline cannot but have a profound and lasting effect upon the industry. Upon converting from war to peacetime products the plants will produce at a much higher rate than on 100-octane grade. Without prophesying a radical jump to all high-octane gasoline, it is easy to see the competitive situation facing the post-war refiner who is not equipped with the catalytic cracking units or other methods for producing the higher octanes.

As of January, 1945, 189 separate projects were involved in the 100-octane program, involving an overall expenditure of $240 million by the government and $850 million by industry, or a total of $1,090,000,000 investment. The government investment was through the Defense Plant Corporation.

On April 6, 1944 (Paw Release No. 421) Administrator Ickes stated that because of the flexibility of modern refining equipment, much of this equipment can be converted to peacetime production, and should be considered as a sound peacetime investment.

The technological advances made in developing this tremendous program, the lessons learned under the impetus of war, will not be forgotten. They might have taken years to develop under normal conditions; now they are a part of our heritage of herculean effort.

Rubber Plants

The office of Rubber Director has announced that the government has $699,798,549 invested in synthetic rubber plants. (Report of Bradley Dewey of August 31, 1944). The bulk of this investment is in butylene, butane, styrene, co-polymer and butyl plants, either operated by the petroleum industry or functioning by means of components produced by the industry.

Dewey's report says: "Over 95 percent of the plants in the synthetic rubber program have been built with the tax payer's money. They are public property. The product of a certain percentage will be needed in the postwar period. Cost of operation of many will be so low that at the end of the emergency, decisions will have to be made as to how they are to be operated. It is hoped that enough will be operated so

as to protect this nation against the danger of ever again being cut off from supplies of rubber.

" * * * I am already on record as stating that I believe that the world demand for rubber after the war will be far greater than the capacity of the world's plantations before the war. This, together with the cost data presented herewith, leads me to the personal belief that not only will specialty rubbers be in demand, because of those qualities which are superior to crude rubber, but that Buna S will be in large demand at prices which will act as a governor and will set a ceiling on the world price of crude rubber. * * *

"I believe the postwar world demand will be so large that there will be need for all the crude rubber present plantations can turn out and also the production of the low-cost producers of the synthetic rubber program—from 400,000 to 600,000 tons. There should be no duties or subsidies or international agreements. This country is today independent for its supplies of rubber of other nations, of the effects of wars between the nations, or the destruction of plantations by plant blights. It must so remain."

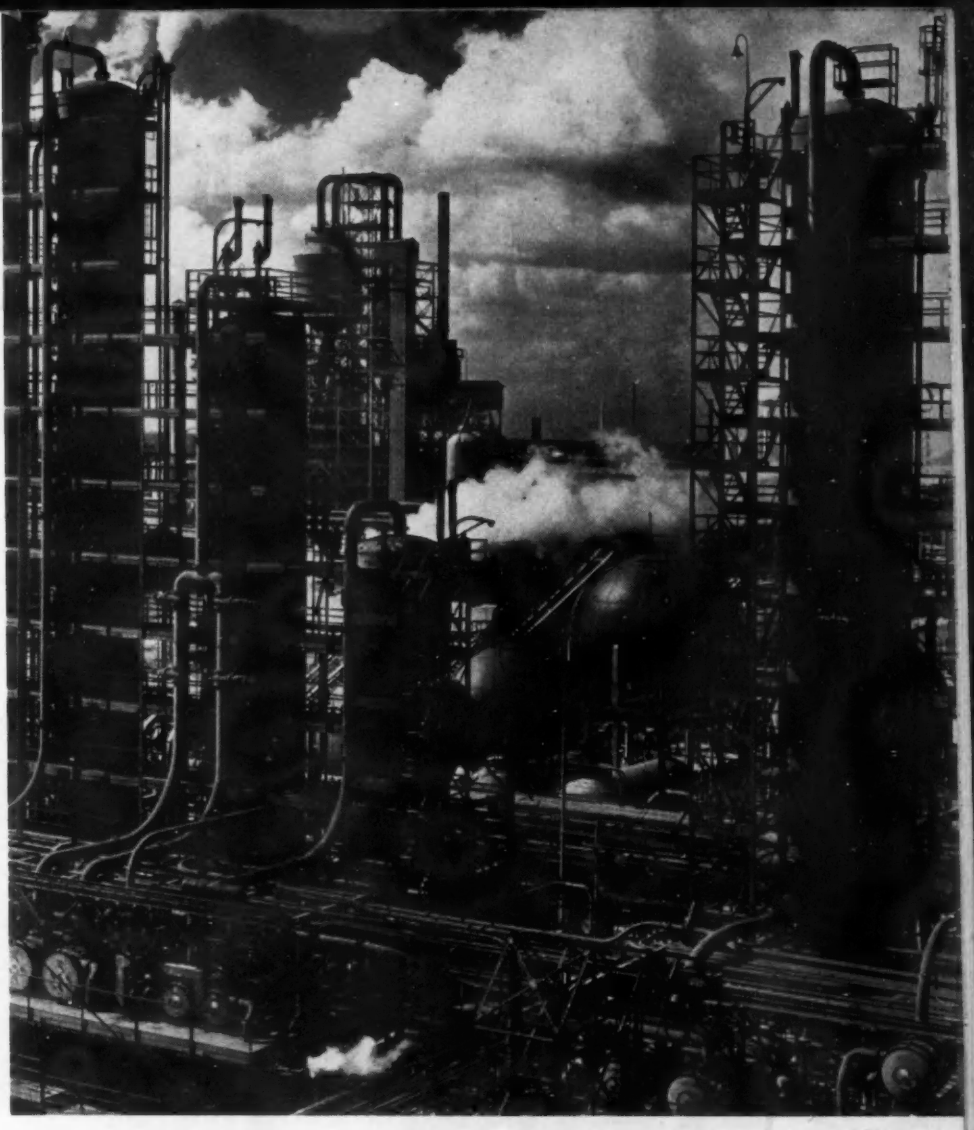
Thus a new industry has been created, which will affect the former economy of the petroleum industry. A new source of income from the barrel of crude. To continue supplying the rubber components may cause a permanent readjustment of refinery cuts and yields.

Such tremendous developments involve numberless permanent influences. One local influence was noticed when the Harris County, Texas, Commissioners Court, sitting as a board of equalization, November 27, 1944, ordered seven Defense Plant Corporation's plants valued at $18,880,180 for real estate tax purposes. Even the county benefits by this development.

It is evident that a new use and market has been developed for the butanes that formerly went into the liquefied gas industry. It is possible that as a result the liquefied gas industry will be forced to look more and more to propane and propane mixtures for their product known to the trade as "L P G". This means, in turn, a revision of equipment to handle the higher pressures involved in storing and distributing the propane as compared to octanes. Some forward looking members of the LPG industry are already gearing their business to handle propane pressures from the bulk plant through the tank truck to the actual outlet. Many thousands of dollars will be involved in such conversions. but a very substantial market it at stake.

On December 23, 1941, conservation order M-68 was issued, establishing drilling units of 40 acres for oil and 640 acres for gas, and containing further standards for the locations of wells. Probably more than any other order, this had an immediate effect throughout the oil industry. Recognizing the shortage of steel for tubular goods and drilling equipment generally, the order limited drilling to a pattern developed by conservation-minded petroleum engineers, and the experience of oil regulatory bodies. To produce the most oil for each ton of steel consumed was the order of the day.

In future years it may well be recognized that more permanent effects of the whole PAW era may stem from this nationwide effort in drilling regulations, than from any other order. It took rules and principlaes from the notebooks of the engineers and the records of state regulatory bodies and overnight made them the law of the land. The educational effect upon the industry as a whole cannot be under-estimated. Many who had never heard of reservoir pressure, porosity, or other fundamentals of big company operation, soon found themselves getting more oil per dollar expended. The glaring searchlight of nationwide publicity had been turned upon the engineers' note book.



100-Octane gasoline plants, involving more than a billion dollars in overall expenditure, and producing 500,000 barrels of 100-octane daily, will operate at a much higher rate upon conversion to peacetime products.

It is evident that having received this involuntary experience in wider well spacing, the attendant saving in material and drilling cost, many in the industry will continue the practice long after PAW and the well spacing order are gone.

George A. Hill, Jr., in *Trends in the Oil Industry in* 1944 states:

"The trend toward wider well spacing has been accentuated by spacing rules fixed by the War Production Board order M-68, and by Petroleum Administrative order 11. These rules were designed to accomplish the development of the widest possible areas with a minimum expenditure of steel and manpower. Under such rules, wider areas have been proven up than would otherwise have been the case with the limited amount of steel available, but it is quite possible that many areas have not been drilled to the density necessary to accomplish maximum ultimate production within the limits of sound economic practice. Adherence to such rules during the period of the material emergency will inevitably influence spacing patterns in the future, when such federal restrictions are no longer imposed and the average size of the individual well unit in the future will be larger than the average size of each such unit just prior to the promulgation of such orders."

In addition to the educational influence of the order, there is the more concrete matter of the wells actually drilled in conformity with the order, which in most cases will continue to produce for many years. There were 19,430 wells drilled in 1942, 19,126 in 1943, and 24,000 (estimate) in 1944. In each instance, in more than 60,000 wells, the interested parties were forced to consider the 40-acre and 640-acre spacing rules.

The well-spacing pattern, fixed and established in these fields, will be a lasting monument to PAW. A glance at a map of any of the fields developed on the larger patterns, such as the accompanying one of the Katy field, will be sufficient to make most observers realize that such a development will not be changed over night.

It is clear that this brief experience

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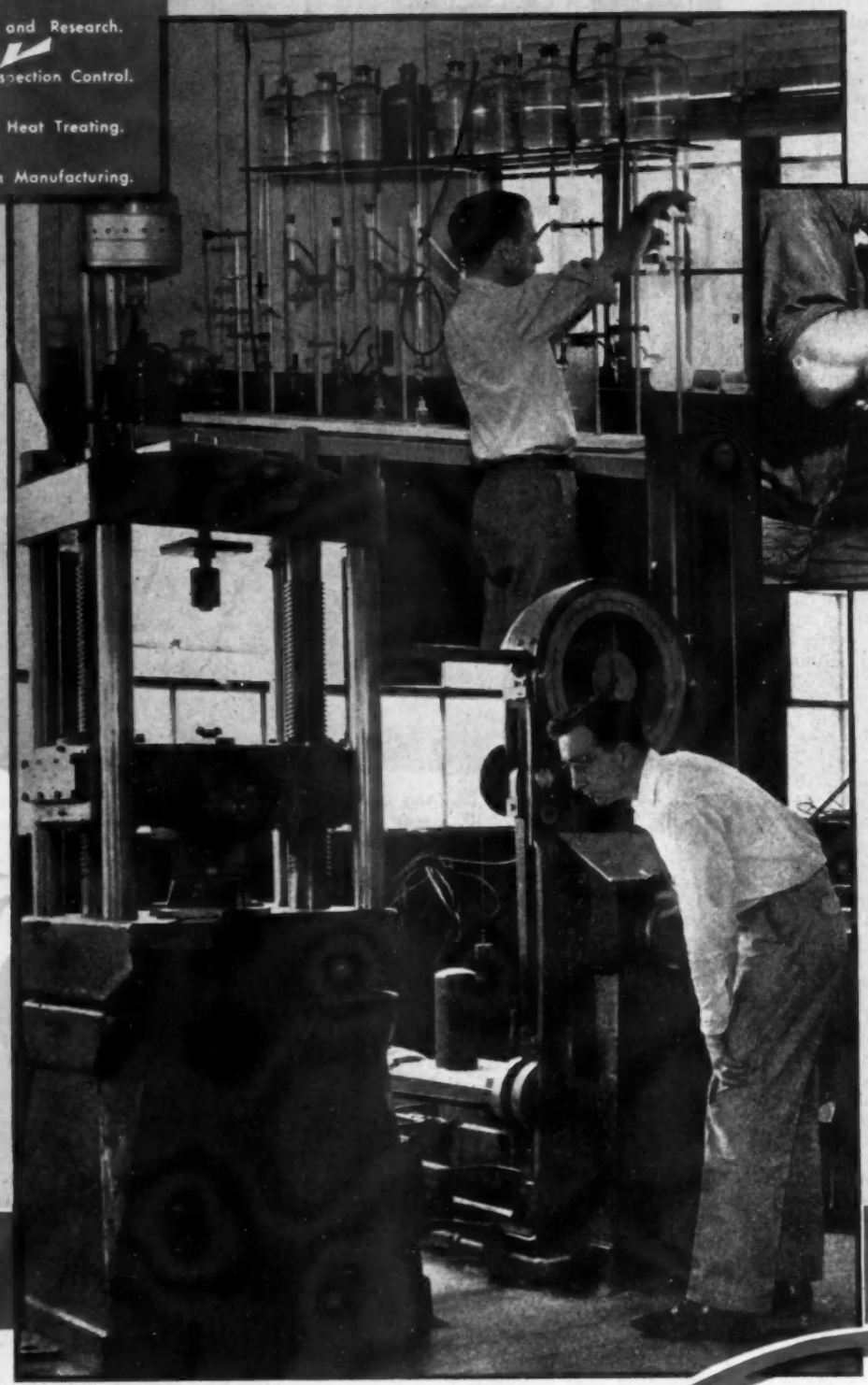

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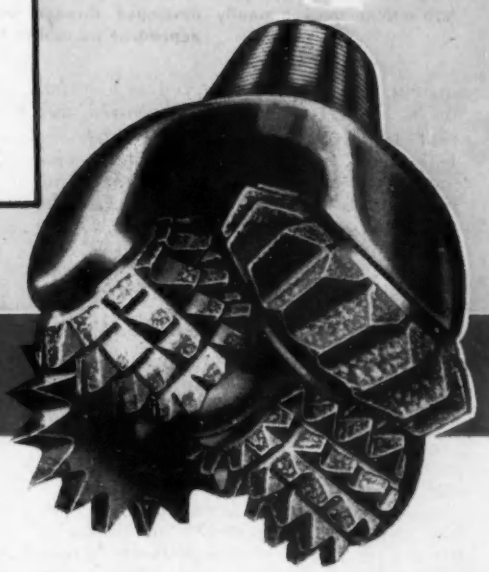

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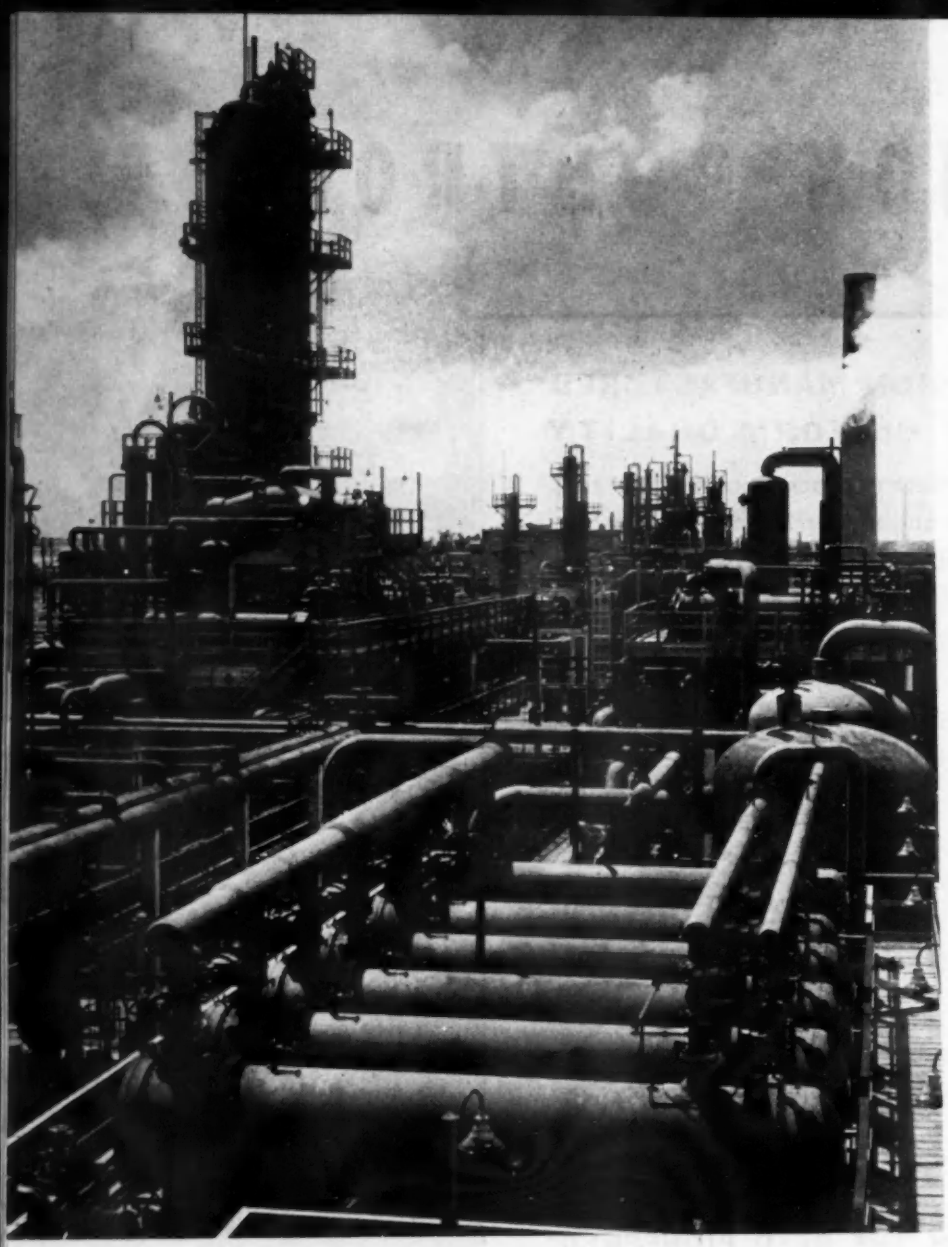


This synthetic rubber plant produces 30,000 tons of finished rubber of the output of nearly a half-million tons annually developed through war necessity. The United States no longer is dependent on rubber from other nations.

in federal control has served as a stimulus to state conservation measures, and that the entire field, covered by the Interstate Oil Compact, will receive more public support and understanding in the future. It is probable that the spectacle of a great oil boom such as in Illinois, carried out without proper conservation measures, will not be witnessed again.

Natural Gas and Condensate Wells

Nowhere has the lagging of state legislation and conservation practices been so evident as in the sphere of natural gas and condensate regulation. The important State of Texas does not even define a condensate well, and classifies wells as either oil or gas (Vernon's Texas Civil Statutes, Article 6008). PAW has turned the spotlight of publicity upon this phase of the industry probably more than any other. This is evidenced by recent articles in trade publications (THE OIL WEEKLY, July 31, 1944, Page 32, October 16, 1944, Page 30, November 13, 1944, Page 27) and by statements of numerous men in the industry (Railroad Commission Meeting, Austin, Texas, December 19, 1944).

By preventing the useless expenditure of material involved in drilling additional wells in areas already abundantly supplied with gas, the conservation of gas has been high lighted. Also by refusing additional wells when gas was being wasted, a step toward better utilization of waste gas was taken.

The formation of units in large fields such as Katy, Carthage, Hugoton and Texas Panhandle will leave a lasting impression upon their future development. The benefits of wider well spacing have been indelibly engraved upon the natural gas industry.

Cycling plant operation has definitely received new impetus during the war. The demand for natural gasoline and the butanes for 100-octane constituents, plus the impetus toward unit operations has greatly increased the number of plants.

Unquestionably the influence of 640-acre spacing will be felt in the industry long after PAO-11 has been forgotten.

Of equal importance is the increasing limitation of the rule of capture imposed by the development of drilling units of larger size. The creation of the drilling units involved in developing fields such as Katy or Carthage on 640 to 800, and in some cases 1280-acre units, has broadened the legal concept relative to units and developed new legal problems not encountered before. Property rights have been created which will not be altered by the dissolution of the PAW and the experience gained in the development of units will make future units easier to form.

Defects in state statutes have come to light and judicial thinking has been stimulated along the lines of conservation practices. In Louisiana it has been decided that the royalty owner under a drilling unit is entitled to his pro-rata share of production even if the well is on a separate lease from his unitized tract (*Dillon V. Holcomb*, 110 Fed. 2nd 610), whereas in Texas it has been decided that a royalty owner is not entitled to participate in unit production not produced from his own lease in the absence of special agreement (*Mueller V. Sutherland* 179 S.W. 2nd 801). As the reciprocal property rights under drilling units become better defined and settled by court decision, operators will be more inclined to their general use, and the mechanics of putting such units together will become simplified and made easier.

Nor has the marketing of petroleum products been untouched by the hands of PAW. One cannot contemplate the closed service stations in the country, estimated in the neighborhood of 30,000, without realizing that this will have some effect upon the industry. The trend is already toward the super-station, where all types of service is supplied.

The joint use of facilities program, stressed the economic waste of cross deliveries and small frequent gasoline dumps. Already there is a noticeable tendency to provide key stations with larger storage tanks to permit larger dumps, in some cases by transport truck direct from the refinery. This trend, of course, had started before the war, but there has unquestionably been an impetus given it by the experience under PAW.

One of the early orders relating to marketing was M-68-c, now Petroleum Administrative order 12. This order affected every part of the widespread marketing organization of the petroleum industry by prohibiting the construction of new filling stations, and rigidly restricting the installation of gasoline storage tanks and dispensing pumps. Based upon the premise that existing facilities are adequate to meet essential civilian requirements, the order eliminated large scale lending and installation marketing equipment.

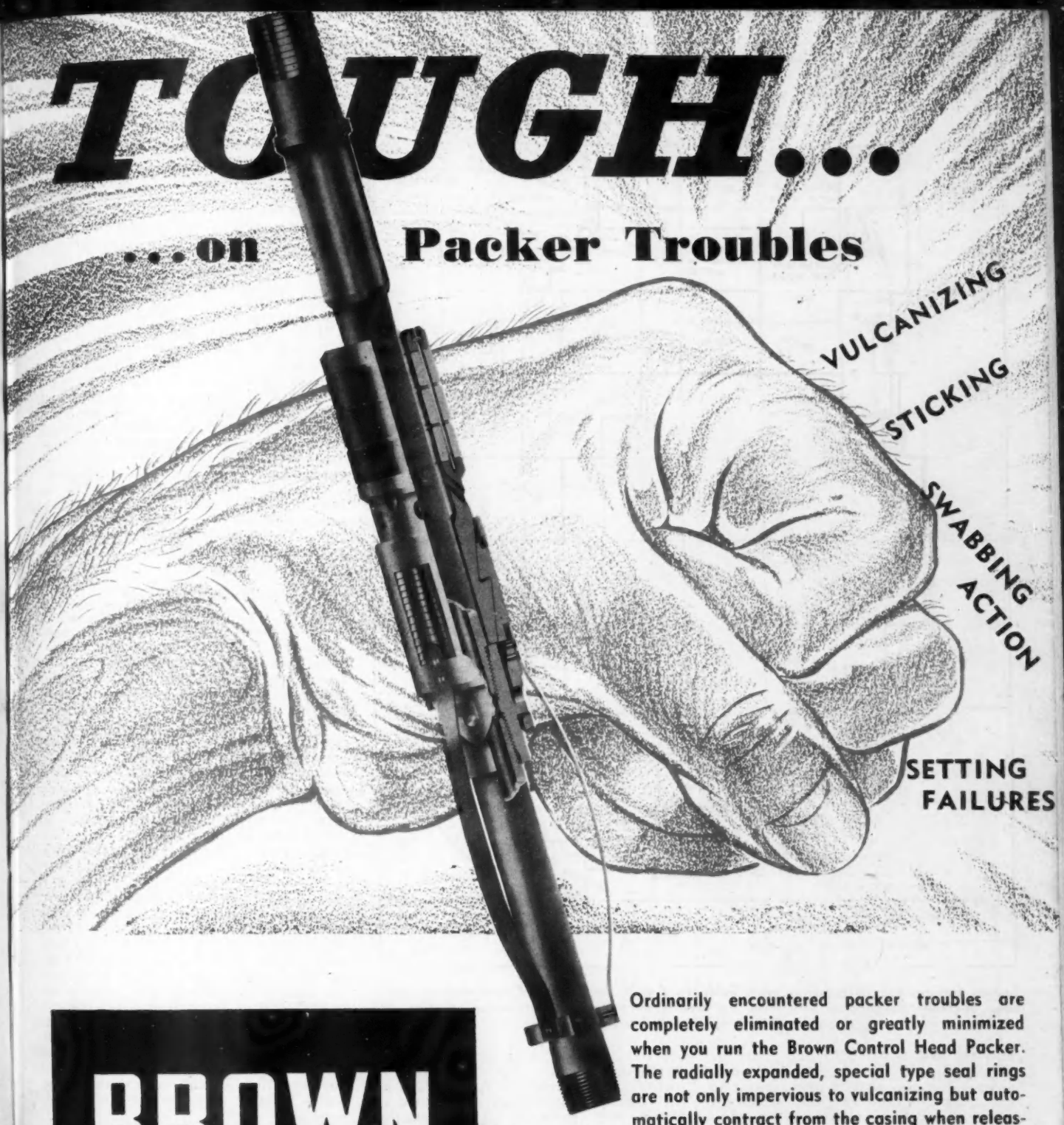
The result has been that many marketers have found that they can do the same business with fewer outlets and with smaller overhead. Old equipment has been continued in use long after it ordinarily would have been retired. There will be a tremendous backlog of new equipment needed after the war to modernize the marketing branch.

The elimination of the credit card was another war measure, and it may have a permanent influence, although some companies are reported as already planning to return to the system. Many individual dealers have found advantage in operating their stations on a cash basis, and on a 48-hour week, and even after the war, many will not return to their previous practices.

The rationing of gasoline and espe-

TOUGH...

...on Packer Troubles



BROWN *Control Head* PACKER

Ordinarily encountered packer troubles are completely eliminated or greatly minimized when you run the Brown Control Head Packer. The radially expanded, special type seal rings are not only impervious to vulcanizing but automatically contract from the casing when releasing the packer. Multiple step cones are pulled from behind the slips, permitting them to swing free as the packer is released. Extra large by-pass areas prevent swabbing as it is removed from the hole. Its rugged, flexible construction assures positive setting and re-setting with ease and simplicity.

The Brown Packer can be run in crooked hole, through casing windows and around dog legs without damage or effecting its operating efficiency. It is ideal for multi-zone completions. In fact, for "Peak Packer Performance" in every way, use the Brown Control Head Packer.

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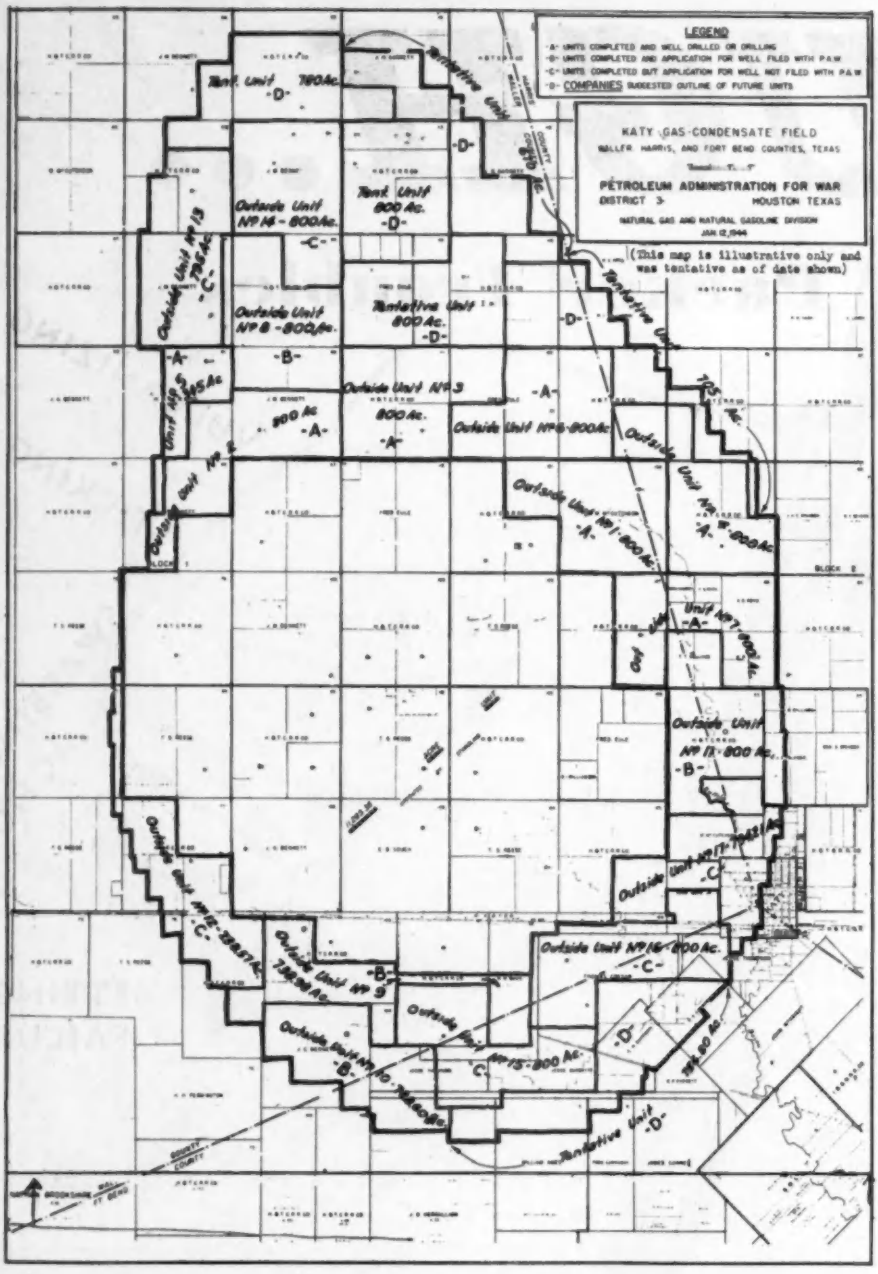
HOUSTON, TEXAS


LEGEND
KATY GAS-CONDENSATE FIELD
PETROLEUM ADMINISTRATION FOR WAR
DISTRICT 3
HOUSTON TEXAS
(This map is illustrative only and was tentative as of date shown)

Spacing patterns and unitization of many fields, fixed under sponsorship of governmental regulations, originally designed to save steel, are serving as models of conservation practice, and operators are unlikely to return to inefficient spacing.

cially the shortage of ethyl has made the ordinary driver more product conscious. Heretofore many drivers were prone to look upon premium gasoline as more a competitive scheme to extract an additional profit out of the gasoline. Since the war the country is definitely octane conscious. When the limitations are lifted there will be more demand than ever before for the higher grades of motor fuel.

After all of these various influences have been felt in transportation, refining, production, and marketing, there remains the one most important contribution of PAW, an achievement that outshines all the rest, which is the conception and execution of an ideal industry-government partnership or cooperation. In this, Deputy Administrator Davies has played the leading role.

Davies has built a design for government-industry cooperation that not only has functioned smoothly to produce the petroleum products required to sustain the war effort, but stands as a distinct contribution to the science of governmental administration. A diagram of the industry committees established in Production, Refining, Transportation, Marketing, shows how they match, step by step, the organization of the PAW functional divisions. There is a complete parallel of organization. Each functioning division in PAW has its alter ego in the industry committee. The result has been monumental.

William H. Boyd, Jr., president of American Petroleum Institute and chairman of the Petroleum Industry War Council, has said:

"I believe firmly that our oil industry, more than any other, has given unexampled cooperation to its government and led the way in putting everything else secondary to providing our fighting forces with means to defeat our enemies." (National Petroleum News, November 14, 1944.)

This was accomplished through the medium of the industry committee in direct contact and meeting with the representatives of government in PAW.

Having once experienced the benefits of close and direct contact and consultation by government, it is not likely that the industry will willingly divorce itself from all participation in the operation of government as it affects its business. The existing committee organization, headed by the PIWC, is a creature of the war emergency only, and will dissolve with the dissolution of PAW.

As an indication that the industry itself has relished the brief and close exposure to government, it is only necessary to read the report of the National Oil Policy Committee of March 1, 1944. The last proposal reads as follows:

"The government of the United States should develop, deliberately and only after mature study, an oil policy, both domestic and foreign, based upon experience, knowledge and insight: a, Such a policy cannot be successfully formulated without consultation with the industry and should not be so attempted."

How is such consultation to be achieved? Obviously by a committee organization similar to the PIWC. The oil policy is to be based upon experience, knowledge and insight to be supplied by the industry.

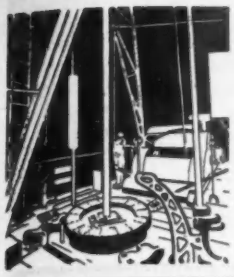
"Period of Trial"

This is a period of trial for the democratic form of government. Never have such demands been made of a democracy, and never has the world been so conscious of governmental structure. Shattered governments all over Europe are in the process of reconstruction. Many envisage the establishment of a world federal state. Capitalism versus state ownership is debated in public forums and upon the humble hearthstone. It is possible that the conception of a parallel organization of government and industry cooperation will be the answer of democracy to the challenge of other types of anti-democratic government.

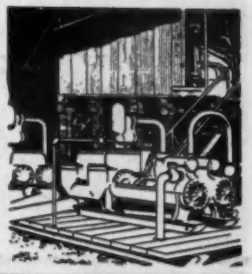
The experience and outstanding success of PAW in this field should receive the close attention of students of political science as well as members of the oil industry, who are vitally concerned with future national oil policy, both domestic and foreign. It may well form the pattern for peace-time cooperation in the field of international oil control, such as is encompassed in the Anglo-American oil agreement of August 8, 1944. Instead of referring to this period as one of government control of the oil business, it may well be known as the period of industry experience in government.

Panels that do not participate, industry observers with no voice or vote, dollar a year experts, have all been tried and found wanting in essential respects. The true teamwork of the PAW-PIWC combination may have many future implications not now envisioned.

Ralph K. Davies summed up the situation very properly in his speech on November 15, 1944, on the 25th anniversary of American Petroleum Institute, when he said: "I believe that both sides have benefitted by this wartime relationship. I know that the industry has gained new insight into the problems of government and into its responsibility to the public. I am certain that the public and the government have gained a new appreciation of the qualities of the industry."



OPERATING HINTS For Drilling Crews



$5.00 is paid for each illustrated acceptable contribution. Mail to The Editor, THE OIL WEEKLY, P. O. Box 2608, Houston 1, Texas

Semi-Trailer Speeds Derrick Transfer

EQUIPMENT HANDLING

A Kansas drilling contractor borrows an idea from the long-distance trucking lines when moving his rigs. He has rigged up a bed on a semi-trailer equipped with two small wheels which are lowered in front when the truck is unhooked. The driver places the trailer in a convenient spot near the piles of material to be moved, unhitches from it, and raises his gin poles. Then with the help of a swamper, he gathers the material and loads it neatly on the trailer.

Having fastened the load with chains, he lowers the gin poles and backs the truck under the trailer. The trailer has a connection which locks in closed position when contacted by the towing device on the truck. As soon as the air brakes are connected and the small wheels are raised the load is on its way to the next location.

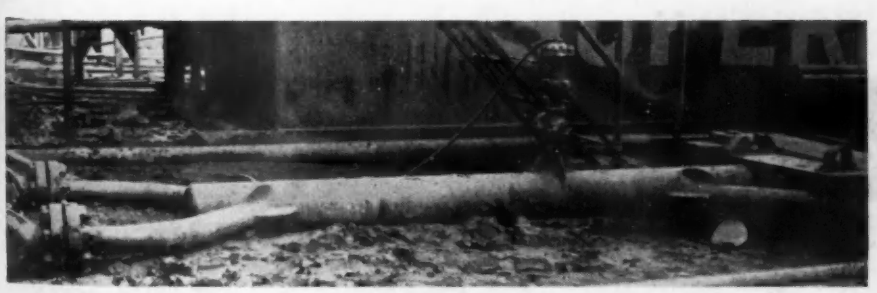
Semi-trailer is cut loose from truck, gin poles set up, and truck used to load unit from most advantageous setting, afterwards being backed under trailer and attached for highway use.

Siamese Mud Manifold Simplifies Flow Control

MUD FLOW CONTROL

When more than one mud pump is employed together with two derrick standpipes, switching the drilling fluid from one source to the other and from one point of use to the other can readily be done when a manifold is set into the discharge. A large joint of pipe is supplied with the required branches, stiffened with welded-on webs and with bolted flanges at each end for convenience when rigging up. The connection to which the pressure indicator is attached is welded, or flanged, to the run of this large pipe so that the proper reading can be obtained on the derrick floor regardless of which pump is being used, or which standpipe is attached to the swivel.

Use of the large-diameter insert in the mud-line tends to dampen out pump pulsations and provide more uniform flow to standpipe, as well as to reduce fluctuations in pressure readings.



Section of heavy 8-inch pipe, with curved branches welded into sides, serves as tie-in for both pump discharge lines and delivery to dual standpipes, with centralized gauge riser.

Unitized Shaker Base Eliminates Foundations

SHAKER MOUNTING

Instead of mounting the shale shaker on one side of the shale pit, one contractor constructs a skid with sufficient scope to span the pit, eliminating the danger of loss or damage to the unit through caving of one bank of the pit—the extended framework tending to brace against opposite walls, and thus to assist each to brace the other.

The heavy pipe forming the main members of the skid, in addition to serving as frame on which are mounted the shaker units and their drives, is converted into a steam muffler-con-

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"REFLEX"
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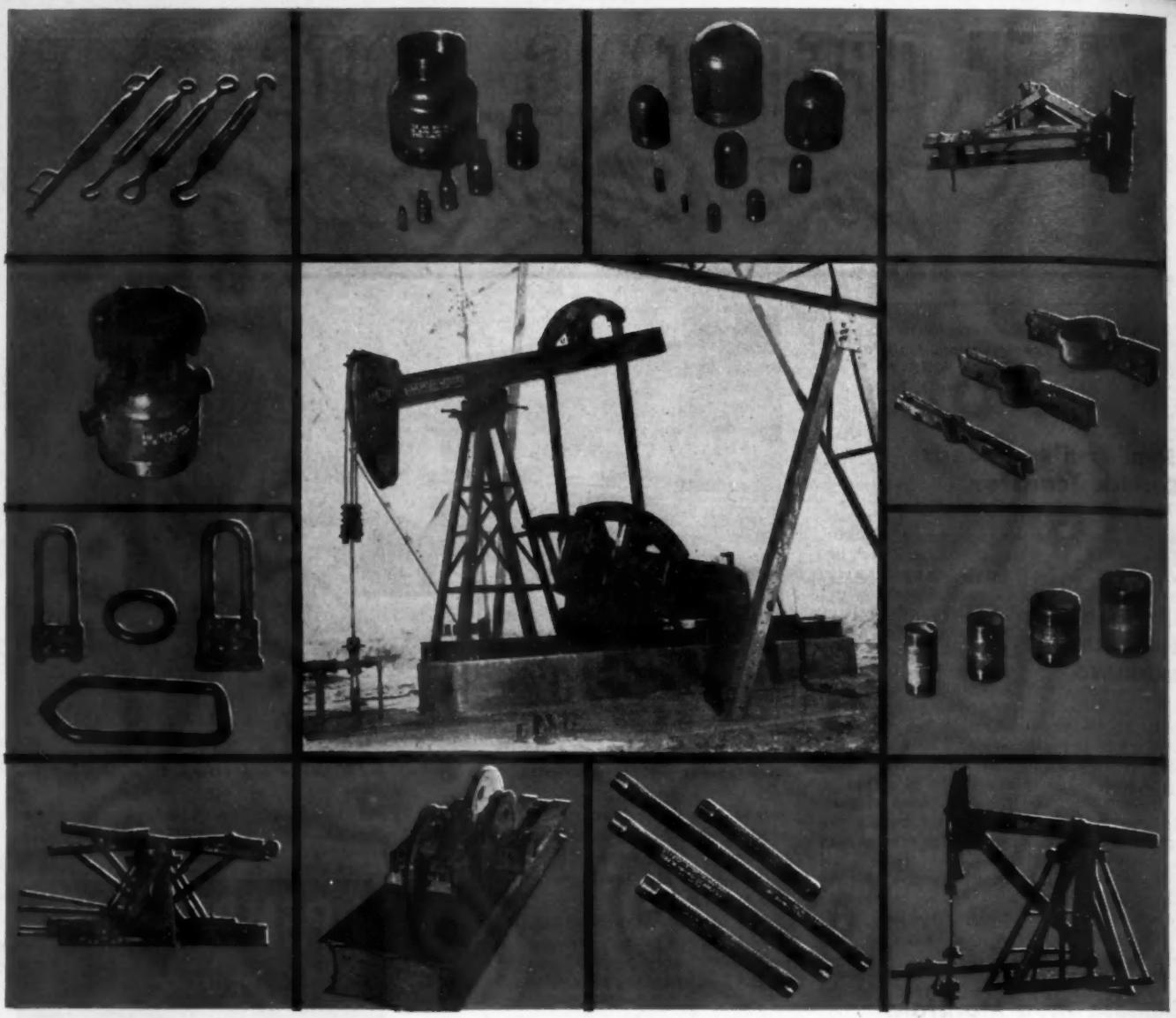
PENBERTHY INJECTOR CO.
DETROIT, MICH. Canadian Plant WINDSOR, ONTARIO



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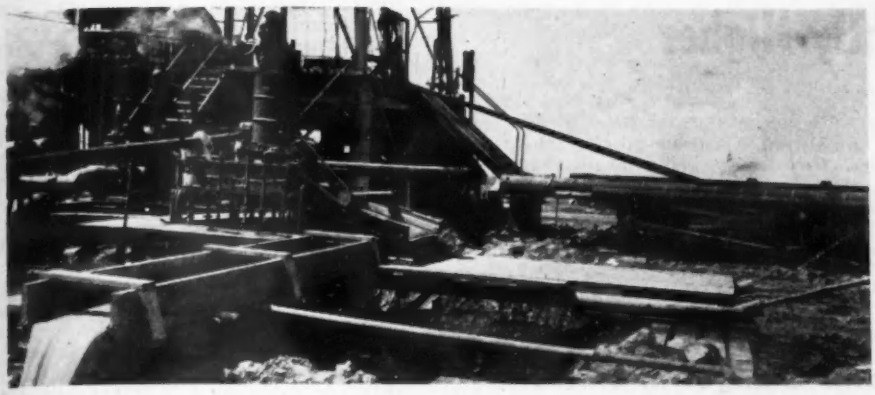
denser unit by closing the ends and leading the exhaust steam from the turbine drive into the end of the skid adjacent to the power unit. At the opposite end a short riser serves as exhaust pipe for such steam as is still in vapor form after traversing the pipe network, while a trap and drain return the condensation to the boiler makeup water pool and thus aids in reducing the amount of water which must be treated before use.



Extended skid members span shale pit and provide bridge while eliminating unit at side of excavation. One skid serves as turbine exhaust leg and condenser, carrying steam beyond rig area.

Standardized Stand for Fire Extinguishers

RIG FIRE PROTECTION

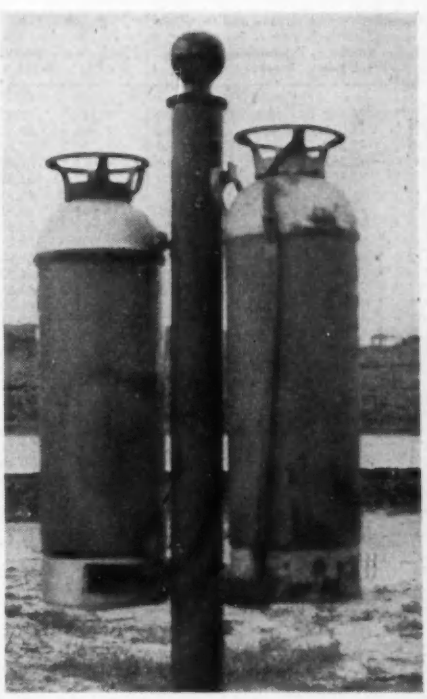
When there is no other support convenient to hand for fire extinguishers at or near the point of probable use, this condition may be corrected by setting a post, of reclaimed 2-inch pipe, in a concrete footing to insure permanence. At shoulder height two brackets are welded to the pipe, being formed to fit loosely within the loop or handle at the top of the standard 2½-gallon extinguisher.

At the proper elevation to fit around the bases of extinguishers when supported by the brackets are welded curved retainers, so that each unit hangs vertically and without cramping on its support.

Extinguishers supported at this height may be lifted off and set directly into a pick-up truck body with a minimum of effort, or may be shifted to a man's back with one hand over a shoulder and through the grip.

If it be desired to dress up the support slightly, it may be given an ornamental top and, for better location in an emergency, the entire post should be painted red.

If the location is permanent, the post is set in concrete, while for transfer with drilling rig, it may either have extensible base or be set in wide, flat disk of concrete for better stability.



Sturdy post mounts dual extinguishers, providing equipment ample for checking fire hazard.

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MONEY
SAVE
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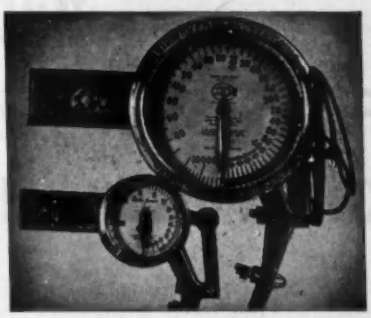
LINE SCALES



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RECTORSEAL
THE POSITIVE LEAK PREVENTER

Fuel Oil Stocks Far Under Year Ago; Civilian Gasoline Slightly Higher

The industry maintained operations at about the same levels in the week ended March 17 as in the previous week. Both production and processing of crude remained close to the highest rates on record. It was possible to continue normal seasonal accumulation of gasoline in storage, and although both light and heavy grades of fuel oils continued to come from the tanks those withdrawals were not abnormal for the latter part of spring. Gasoline stocks are at satisfactory levels, being larger than at this time last year. But inventories of distillate fuel oil and residual fuel oil are substantially lower than a year ago. Residual stocks are at the lowest level in many years.

United States production of crude oil averaged 4,774,000 barrels daily in the week ended March 17, an increase of 6000 over the previous week and 389,000 a day or 9 percent more than output in the corresponding week a year ago. Crude runs to stills at all refineries of the country were estimated at 4,773,000 barrels daily, practically the same as domestic production of crude. This rate was 4000 less than in the preceding week but 285,000 a day or 6.4 percent above runs in the like week last year. For a considerable period, refinery runs have been equaling or exceeding domestic production of crude, an abnormal situation brought on by war conditions. This has been possible through withdrawals from abnormally low crude stocks and through increased imports of crude. Stocks of refinable crude in the country totaled 218,760,000 barrels March 10 this year, having increased 85,000 or at the rate of 12,000 daily during the week ended on that date. The current inventory is about 18,000,000 barrels or 7.5 percent less than the 236,748,000 barrels on hand March 11 last year.

Production of gasoline, including natural blended at refineries, averaged 2,069,000 barrels daily in the week of March 17, a decrease of 11,000 a day from the week before but 190,000 a day or 10 percent more than output in the comparable week last year. Stocks of finished and unfinished gasoline accumulated at the rate of 224,000 barrels daily, having risen to 98,882,000 barrels. That amount was 14,194,000 barrels or 16.8 percent more than the 84,688,000 barrels held on March 18 a year ago. However, of the 14,000,000-barrel gain in gasoline stocks over a year ago, only a little over 2,500,000 barrels represent civilian-grade gasoline, the remaining 11,500,000-barrel increase having been in military and other gasoline. Stocks of civilian grade totaled 53,411,000 barrels on March 17, compared with 52,724,000 a week earlier and with 50,794,000 barrels a year previously. All other gasoline stocks totaled 45,471,000 barrels March 17, compared with 44,586,000 a week before and 33,894,000 a year before.

Gas oil and distillate fuel oil production averaged 647,000 barrels daily in the week of March 17, down 51,000 from the week before and 15,000 a day or 2.4 percent less than output in the like week last year. Stocks of these fuels were reduced at the rate of 74,000 barrels daily during the week, having declined to 26,483,000 barrels. That amount was about 5,000,000 barrels or 16 percent less than the 31,620,000 barrels on hand March 18, 1944.

Residual fuel oil production averaged 1,292,000 barrels daily in the week ended March 17, down 101,000 a day from the week before and off 40,000 a day or 3 percent from the rate in the like week last year. Stocks were used at the rate of 62,000 barrels daily as they came down to 43,718,000 barrels. That total was about 8,000,000 barrels or 15.5 percent less than the 51,716,000 barrels held March 18 last year and represented a new low since World War I times.

Trends of Operations and Changes in Stocks

Figures on crude stocks are from Bureau of Mines weekly reports; all others from American Petroleum Institute weekly reports, which are estimates on Bureau of Mines basis.

(All figures in thousands of barrels—add 000)

HIGHS AND LOWS OF RECENT YEARS

ITEM	Crude Oil Prod. Barrels Daily	Crude Oil Prod. Week Ended	Runs to Stills Barrels Daily	Runs to Stills Week Ended	Crude Stocks Barrels	Crude Stocks Week Ended	Gasoline Stocks Barrels	Gasoline Stocks Week Ended	Gasoil and Distillate Stocks Barrels	Gasoil and Distillate Stocks Week Ended	Residual Fuel Oil Stocks Barrels	Residual Fuel Oil Stocks Week Ended
High:												
1941	4,337	11-22	4,120	10-18	266,187	3-29	99,727	3-29	[1]54,983	11-15	102,448	1- 4
1942	4,337	2- 7	3,961	1- 3	263,208	3-28	[1]109,281	3-14	47,861	11-14	95,857	1- 3
1943	4,436	11-13	4,331	12- 4	245,752	5-29	94,159	3-20	47,187	11-27	72,881	1- 2
1944	4,762	9-30	4,798	12-30	240,992	1- 1	89,162	4- 1	48,863	10-28	64,644	10- 7
1945	[1]4,780	2-17	[1]4,803	2-24	221,628	1-20	98,882	3-17	38,298	1- 6	56,074	1- 6
Lows:												
1939	[2]1,601	8-26	3,125	2-18	[2]229,127	10-12	71,152	10- 7	20,722	4-15	105,397	4- 8
1941	3,364	1-11	3,490	1-18	240,399	11-15	79,923	10- 4	28,382	4-12	90,914	7-12
1942	3,297	7- 4	3,393	5-23	231,896	12-12	75,934	12- 5	29,240	4-25	72,962	12-26
1943	3,821	1- 9	3,579	3-13	232,191	1- 9	68,182	10-16	30,732	4- 3	57,596	12-25
1944	4,357	1- 1	4,228	2-12	220,258	9- 9	76,302	1- 1	30,232	4-19	49,737	3-18
1945	4,678	1- 6	4,656	1- 6	[4]218,675	3- 3	86,616	1- 6	26,483	3-17	43,718	3-17

TRENDS OF 1944 AND 1945

Trends in Week Ended:	Crude Oil Production Daily	Crude Oil Runs to Stills Daily	Crude Oil Stocks Week End	Gasoline Production Weekly	Gasoline Stocks Week End	Gasoil and Distillate Production Weekly	Gasoil and Distillate Stocks Week End	Residual Fuel Production Weekly	Residual Fuel Stocks Week End
1944:									
January 1	4,357	4,453	240,992	13,192	76,302	4,575	42,310	9,141	57,330
January 29	4,409	4,359	240,251	13,427	81,075	4,054	37,266	8,889	52,857
February 26	4,423	4,377	237,137	13,183	85,248	4,558	33,766	8,952	51,387
March 25	4,385	4,443	236,285	13,362	87,287	4,979	31,319	9,013	51,669
April 1	4,383	4,435	234,667	13,824	89,162	4,450	30,530	8,367	51,326
April 29	4,431	4,300	235,342	13,126	88,462	4,284	30,236	8,398	49,985
May 27	4,514	4,532	234,423	13,502	86,468	4,702	32,035	8,568	49,812
July 1	4,587	4,638	228,860	14,052	83,559	4,496	35,360	8,872	52,235
July 29	4,608	4,627	225,112	14,115	82,665	4,833	38,135	8,900	56,280
August 26	4,667	4,698	222,931	14,112	80,740	4,566	41,453	8,680	59,839
September 30	4,762	4,775	222,393	14,494	78,028	4,622	45,329	9,292	64,226
October 28	4,740	4,658	223,235	14,117	79,058	4,772	48,705	8,985	64,382
December 2	4,712	4,693	221,591	14,853	80,427	4,082	45,832	8,981	61,727
December 9	4,704	4,552	220,258	14,611	80,880	4,056	44,436	8,923	60,458
December 16	4,695	4,537	222,075	14,145	82,747	4,353	42,413	8,727	59,280
December 23	4,729	4,682	222,575	14,635	83,355	4,605	40,846	8,798	58,509
December 30	4,705	4,798	222,998	15,342	86,614	4,257	39,495	9,156	57,430
1945:									
January 6	4,678	4,656	220,331	14,472	86,616	4,533	38,298	9,092	56,074
January 13	4,722	4,570	221,114	14,139	87,814	4,408	36,410	8,993	54,207
January 20	4,733	4,686	221,628	14,554	88,708	4,586	35,041	9,082	52,554
January 27	4,727	4,756	221,310	14,957	88,223	4,843	33,651	9,252	51,119
February 3	4,723	4,662	221,674	14,535	91,034	4,559	32,370	9,377	50,451
February 10	4,728	4,770	218,894	14,996	92,455	4,565	30,544	9,237	48,845
February 17	[1]4,780	4,787	220,060	14,910	94,680	5,053	29,864	9,234	48,240
February 24	4,777	[1]4,803	219,351	15,500	95,972	4,958	28,753	9,084	46,713
March 3	4,765	4,753	[4]218,675	14,704	97,603	5,026	28,110	8,728	45,021
March 10	4,768	4,777	218,760	14,557	97,310	4,887	27,001	9,752	44,150
March 17, 1945	4,774	4,773	.....	14,481	98,882	4,527	26,483	9,042	43,718
March 18, 1944	4,385	4,488	[5]236,748	13,155	84,688	4,637	31,620	9,325	51,716
Change:									
In week	+6	—4	+85	—76	+1,572	—360	—518	—710	—432
In year	+389	+285	—17,988	+1,326	+14,194	—110	—5,137	—283	—7,998
In year	+8.9%	+6.4%	—7.5%	+10.1%	+16.8%	—2.4%	—16.2%	—3.0%	—15.5%

[1] All time peak. [2] Lowest between January, 1922 and July 1, 1944. [3] Lowest since October, 1922, due to shutdown of six Mid-Continent states. [4] Lowest since December, 1921. [5] Stocks, March 11, 1944.

Pipe Line Review

95-Mile Extension of TGT Line Urged on FPC

Approval of plans of the Tennessee Gas and Transmission Company for construction of a 95-mile natural gas pipe line from the San Salvador Field, Texas, to its present main line was urged upon the Federal Power Commission by company officials March 21 at the opening of hearings on the application.

Gardiner Symonds, president of the company, explained that the War Production Board, emphasizing the necessity of an increase in the capacity of the Tennessee system to make additional gas available in the Appalachian area next winter, had given assurance that the necessary priorities and preference ratings would be issued for prompt construction of the facilities.

Total cost of the project was placed by Symonds at approximately $8,500,000, of which about $6,000,000 is to be provided by Defense Plant Corporation for four compressor stations with a total of 33,600 horsepower, which the company is to operate under lease.

The new facilities will increase Tennessee's delivery capacity by about 60 million cubic feet per day.

Five Loops Completed in Texas-New Mexico's Line

The Texas-New Mexico Pipe Line Company, Houston, has completed five loops totaling 30.2 miles in its Houston-Crane 12-inch crude line. The company expects to complete station work in April. Midwestern Engineering, Tulsa, is the contractor.

15-Mile Line Completed By Sun Pipe Line Firm

Sun Pipe Line Company has completed about 15 miles of 8-inch gathering line from Premont to Sullivan City, Starr County, Texas. Allied Welding and Engineering Company, Houston, was the contractor.

Humble Pipe Line Company Lists Personnel Changes

Humble Pipe Line Company has announced that effective January 1, 1945, F. D. McMahon returned to active duty and was made assistant general superintendent in charge of operating and personnel matters while H. M. Stevenson, former chief engineer, was made assistant general superintendent in charge of engineering, construction, research and development. A. E. Pecore became chief engineer, in charge of the engineering department.

Effective March 16, 1945, the following changes were made:

A. J. Muller, district superintendent, Odessa district of Panhandle-West Texas division, promoted to assistant division superintendent, Southwest Texas division and transferred to Corpus Christi.

W. A. Hugg, district superintendent, Ingleside district of Southwest Texas division, transferred as district superintendent to Odessa district of Panhandle-West Texas division.

G. W. Oliver, district superintendent, Benavides district of Southwest Texas division, transferred as district superintendent to Refugio district of Southwest Texas division.

J. A. Vanhoof, chief engineer at Viola station, promoted to district superintendent and transferred to Benavides district of Southwest Texas division.

The district formerly known as Ingleside district was changed to Refugio district, effective March 1,

Effective March 15, C. H. Lundt, formerly senior mechanical engineer, becomes assistant chief engineer and A. B. Steen becomes acting chief draftsman during the period of D. H. McKinney's military leave.

To become effective upon the retirement, July 4, 1945, of T. R. Hanrahan as division superintendent, Southern division, A. E. Payne, assistant division superintendent, will become division superintendent and W. S. Spangler, of the engineering department, will become assistant division engineer of the Southern division. Although the actual promotion will not take effect until July 4, Spangler was transferred from the engineering department and assumed duties with the Southern division March 15.

Larue Line Being Laid

Merrimac Oil Company is constructing a 3-mile 3-inch line from the Bacon Lime Larue field in Henderson County, Texas, to the Ash Switch loading rack. The line will be the first for the field.

Line Near Completion

Swinerton and Walberg, Houston contractors, expect to complete this week the relaying of 25.2 miles of 6-inch line from the Goldsmith and Penwell fields, Ector County, Texas, to Shell Pipe Line Corporation's pumping station near Crane.

Gathering Line Laid

Allied Welding and Engineering Company, Houston, has laid 28,000 feet of line in the Pan-American Pipe Line Company's gathering system in the Willamar district, Texas Gulf Coast.

Indian Lands Offered

Sealed bids for oil and gas leases on restricted lands of the Five Civilized Tribes will be received at the office of the superintendent at Muskogee, Oklahoma, up to 10 a. m. April 10. Counties where leases are offered include Nowata, Washington, Creek, Okfuskee, McIntosh, Hughes, Seminole, Pittsburg, Pontotoc, McClain, Garvin, Stephens, Carter, Love and Ryan.

Approval for Line Crossing Mississippi Is Granted

The Interstate Oil Pipeline Company has been given permission to cross Mississippi highway rights-of-way in consructing a proposed pipe line from Liberty, Mississippi, to Baton Rouge, Louisiana.

A Highway Department spokesman said a permit for the crossings had been signed for Interstate with "the knowledge ond approval of Mississippi's Governor Bailey, who previously had announced he would fight the proposition.

Feeder lines of the system will connect with the Cranfield field in Adams County and the Mallalieu field in Lincoln County.

Construction of the Liberty-Baton Rouge line was announced several weeks ago by the Interstate Oil Company. Oil from the Cranfield field now is being piped across the river to St. Johns landing, where it is barged to Baton Rouge for refining. The line will not change the status of marketing the Cranfield oil, operators pointed out.

$292,142 Bid for Leases On Mississippi Lands

United States Forest Supervisor Hugh S. Redding announced that high bids for oil and gas leases on 12,887.94 acres of national forest land in Scott, Lincoln, and Franklin counties, Mississippi, totaled $292,142.93 for an average of $22.67 per acre. Bids on the land in the Bienville and Homochitto National forests will be submitted to the Secretary of Agriculture for final approval.

High bidders were Gulf Refining Company, Stanolind Oil & Gas Company, Shell Oil Company, Pan-American Production Company, Caroline Hunt Trust Estate, William Herbert Hunt Trust Estate, and Placid Oil Company.

Oil Treaty Made

The Roumanian Ministry of Economy has negotiated a treaty with Turkey whereby Roumanian petroleum products will be exchanged for Turkish cotton, wool and raw hides. The exchange of goods is scheduled to begin by July 1, 1945.

Women Win Awards

Miss Mabel Evans and Miss Grace Tempser were awarded 20-year service pins by H. N. Greis, president of Deep Rock Oil Corporation. They are the first women in the organization to receive the award.

East Texas API to Meet

J. H. Murrell of DeGolyer and McNaughton, Dallas, will speak on the middle east at the first spring meeting of the East Texas API March 30 at 8 p. m. in the Kilgore High School auditorium.

International Developments

Consolidada Plans 50 More Wells in Monagas Vicinity

Compania Consolidada de Petroleo (Sinclair) plans at least 50 wells outside of present producing areas in the vicinity of the Santa Barbara field of northwestern Monagas, Venezuela.

The company has recently acquired large concessions adjoining or close-in to the producing district. New holdings include 58,700 acres acquired during the first ten weeks of this year. The announced plan of the company is to extend production to the south, southeast and southwest of the Santa Barbara field proper, while continuing to drill up inside locations in the field.

Also in the company's books for 1945 is the initiation of repressuring operations in the Santa Barbara field. Inasmuch as there are no abandoned wells in the field, all input wells will be drilled during coming months. Producing wells at Santa Barbara are spotted on a 25-acre pattern.

Venezuelan Output Drops After Mid-February Spurt

Oil production in Venezuela averaged 818,489 barrels per day for the week ending February 19. This was the peak rate for 1945, up to March 5, and higher than at any time during the last three months of 1944. Production dropped below 800,000 barrels daily during the following two weeks, however, and is currently in the neighborhood of 792,000 barrels.

The mid-February spurt is assumed to have resulted from placing into operation on February 13 the new Mene Grande-Creole pipe line from the Jusepin field to Puerto la Cruz, as a result of which optimum shipments from all fields in eastern Venezuela is now approximately 300,000 barrels per day.

Due to continuing deficiency in tanker vessel service and declining refinery demand for the low-gravity crudes of the Lake fields in western Venezuela, the lighter oils of eastern Venezuela are apparently receiving preference for transportation to refineries outside the country. The output from the Lake fields is now running about 20 percent below the rate that prevailed six months ago.

Production in Colombia Fields Continues Decline

Combined crude oil production of shipping fields in the De Mares and Barco concessions of Colombia amounted to 1,269,516 barrels for January, continuing a decline that has been progressive since October, when the country's output attained a wartime high of 1,937,943 barrels. The January yield was approximately 455,000 barrels less than the December figure.

The steady recent decline is ascribed to lack of tanker vessel availability and surplus storage capacities at pipe line terminals in Covenas and Cartagena. Refinery operations at Barranca Bermeja and Petrolea have been maintained at normal rates or better. Throughput at the Tropical Oil Company refinery at Barranca Bermeja in January was 421,602 barrels. The Petrolea refinery of Colombian Petroleum Company handled 12,533 barrels during the month.

A comparison of relative January production in the two concessions shows that the De Mares fields of Infantas and La Cira produced 1,089,265 barrels, while the Barco fields (Petrolea and Tibu) produced 180,251 barrels.

Colombian Firm Has Three Tests Under Way in Barco

Colombian Petroleum Company had 3 drilling operations under way March 14 in the Tibu area of the Barco Concession. One of the wells, Tres Bocas 4, drilling at 1670 feet, is reported drilled to completion as a deep test of the Cretaceous section.

Two previous Cretaceous wells have been put down in the Tibu fields—one on the Socuavo structure and one on the Tres Bocas structure. Both of the earlier wells blew in as distillate producers and are at present shut in. The Tres Bocas 4 is expected to be a more conclusive test of the Cretaceous, which yields all the production in the Petrolea field farther south. All commercial production so far opened in the Tibu area comes from Eocene pays.

Socuavo 15 had been completed as a flowing well on March 15, while No. 16 was drilling below 4350 feet on that data. Socuavo 17 has been spudded and surface casing set at 262 feet.

New South Wales Output Gains 18 Percent in 1944

The Australian Ministry of Mines reported that 97,600 barrels of crude oil were recovered during 1944 in operations at Glen Davis, New South Wales—an 18 percent increase over 1943 operations. Almost 25,000 barrels of gasoline were secured from the shale crudes.

Production facilities at the Glen Davis plant are being expanded and it is expected that crude output will be increased to 250,000 barrels for the year. The Glen Davis shale is generally considered the richest in the world.

Wildcat Nears Objective

San Vicente 1, wildcat being drilled by the Socony-Vacuum Oil Company in the Apure basin of Barinas, Venezuela, was drilling below 6460 feet on March 14. It is reported that the company will drill two more wildcats in Barinas before making final selection of concession blocks.

Peru Boosts Oil Tax

An additional 2 percent ad valorem tax has been added by Peru on petroleum and petroleum products exported from that country. The new tax will be effective throughout 1945, after which it is presumed the previous rate of 35 percent will apply, instead of the current total of 37 percent.

Poland Needs $2,000,000 Worth of Oil Equipment

A committee of Polish engineers has completed a study of the equipment needs for restoring the country's oil fields to maximum production efficiency, according to the Polish Ministry of Information. They estimate that new tubular goods, pumping and other production equipment needed will amount to more than $2,000,000 at present prices. More than $750,000 worth of drilling and workover equipment will be required in addition. These supplies will have to be secured through normal commercial channels, since UNRRA funds are not to be made available for such purchases.

Lower Estimate Made of Swedish Shale Oil Reserve

A thorough resurvey of oil shale deposits in Sweden showed recoverable oil reserves to be about 28 percent lower than previously estimated. The most promising deposit, at Kinne Kulle, has been found by core drilling to contain approximately 18 million metric tons of oil-bearing shale, with an average oil content of 4.4 percent, exploitable by open cut mining. An additional 60 million tons of the same shale is available in the vicinity by underground mining. This shale is suitable for distillation processing.

The shale reserves in southeastern Skane have an average oil content of only 2.1 percent, and cannot be treated by distillation methods. Because of their vanadium and aluminum content, however, they are regarded as economically workable by chemical extraction methods.

Soviet Fist Closes on Bulk of Oil in Europe

Justification for concern regarding Russia's postwar intentions as to jurisdiction over oil-producing regions in countries bordering the Soviet Union is seen in the fact that approximately 86 percent of Europe's crude oil potentials, outside of Russia itself, belong to Roumania, Austria, Hungary, Poland and Czechoslovakia.

Most reliable estimates of current producing ability by countries is as follows: Roumania, 34,175,000 barrels per year; Austria, 9,213,000 barrels; Hungary, 5,025,000; Poland, 2,350,000; and Czechoslovakia, 214,400 barrels. The total for these five countries (approximately 51,000,000 barrels) compares with only 8,596,000 barrels producible by Germany, Albania, Great Britain, France and Italy combined.

Floresanto Shut Down

Sinu Oil Company has suspended operations on Floresanto 1 wildcat in western Bolivar, Colombia, due to lack of fuel oil. Fuel used for drilling operations is hauled up the Sinu River from Covenas. Low water has made the river unnavigable, and drilling operations may not be resumed until late in April. Hole had been made to approximately 6300 feet before the fuel failure.

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U. S. Field Operations

Oklahoma

Deep Anadarko Wildcat Running High on Viola

Deep Anadarko Basin wildcat running high on Viola; key test planned northwest of West Edmond pool; new Garber discovery well gets workover after showing salt water; Sykora wildcat opens new oil pool west of Paden.

McClain County: After 2 indifferent successes last year The Carter Oil Company appears on the verge of opening up important pay in the Ordovician measures of the Anadarko Basin which many Oklahoma oil operators believe will be a source of important new reserves. Carter's McBride 1, CSE NW 9-7n-3w, near Washington, topped the Viola lime 50 feet higher than operator's Cottingham 1, discovery well for the Washington pool which is ½ mile north of the McBride test. Latest reports had the well coring at 10,600 feet in the Dolomite with some sand grains indicating that the Wilcox had been reached. Top of the Simpson was 10,490 feet.

In the general area 2 other deep tests claim attention. Cities Service Oil Company's Lawson 1, CSW NW 22-5n-4w, in the extreme southwest part of McClain County, drilling below 8207 feet and headed for 12,000 feet, and Magnolia Petroleum Company's Cunningham 1, SE SE SE 33-5n-6w in Grady County which encountered high pressures at 10,855 feet and was reconditioning mud.

Kingfisher County: Northwest of the West Edmond pool Gulf Oil Corporation staked a key wildcat and was awaiting contractor. The well is Triplitt 1, CNE SW 8-15n-5w, 4 miles from the nearest West Edmond producer on a 3000-acre block west of Cashion. The test is projected to 7500 feet and is predicated on seismograph and geological data of the Hunton Arch. A number of major and large independent operators hold acreage near the Gulf block.

Garfield County: Cities Service Oil Company's Mariner 1, NW NE NW 6-22n-4w, discovery well for the New Garber pool north of the old Garber area, was cutting 10 percent water and operator has plugged back in a water shutoff attempt. The well was completed early in February, flowing 2500 barrels of oil daily from Arbuckle lime between 5247-97 feet. It was plugged back from 5297 feet to 5260 feet and was pumping water used to kill production.

Okfuskee County: J. E. Crosbie, Incorporated opened a pool west of Paden at Sykora 1, NE NE SW 20-12n-7e. Perforated in the Hunton lime zone between 4445-75 feet and acidized with 7000 gallons, the wildcat flowed and swabbed at the rate of 7 barrels of clean oil an hour. The well is bottomed at 4696 feet in the first Wilcox zone. A drill-stem test of the Cromwell between 3892-95 feet showed 300 feet of oil.

West Edmond: Rains and bad roads slowed operations in the West Edmond pool as a dozen wells neared the testing stage. Continental Oil Company completed another good producer at Seyller 2, CNW SE 4-14n-4w, Oklahoma County, which gauged 2400 barrels of oil in 24 hours through ¾-inch choke from the Bois D'Arc and Chimney Hill sections of the Hunton lime.

Pawnee County: Phillips Petroleum Company's Diamond 1, NW NW SE 35-23n-3e, Watchhorn area, which in the Tonkawa sand at 1834-44 feet logged an estimated 2 million cubic feet of gas, picked up the Perry sand at 2188 feet. Core from 2208-18 feeet yielded tight dry sand except for the last 6 feet, which were slightly stained. The test was drilling in shaly sand.

Caddo County: Sinclair Prairie Oil Company staked a wildcat location along the Apache trend which extends from Fort Sill through the Apache pool to near the town of Carnegie. Although not a deep test, the well is located within the limits of the Anadarko Basin. Well location will be in 36-7n-13w and the test will drill to 4500 feet or the Deese sand. Another interesting Caddo County wildcat is The Texas Company's Worden 1, SE SE SE 17-8n-10w on the Gracemont structure which was drilling below 9500 feet with no information on tops as yet available.

Nebraska

Scotts Bluff County: Fuerst Oil Development Company, Inc.'s Dorsch 1, wildcat in NW SW 6-20n-54w, was coring at 5275 feet after reporting an oil show. Electrolog was run to 5254 feet. Strong gas shows were reported at 5234-50 feet with rainbows showing in the slush pit. Went-Emerick Drilling Company of Clearwater, Kansas, has the contract.

Dawes County: Amerada Petroleum Corporation plans a deep test 4 miles west of Chadron. Previous wells in the area have reached 1500 and 2000 feet and Amerada's test may be drilled to 10,000 feet. The company has a lease concentration of 225,000 acres in Dawes County, Nebraska, and Shannon and Fall River counties, South Dakota.

Missouri

Platte County: Fell & Reid's Klam 1, CSE SE SE 19-51n-33w, northeast of Parkville, set 8-inch pipe at 965 feet and

Wells Completed in the United States in Week Ended March 24, 1945

Data preliminary and subject to revision. Revised and more complete data on all completions shown in monthly summary of drilling, published in second issue of each month. More detailed data on wildcats published in third issue of each month.

State or District	FIELD COMPLETIONS: New Wells *Oil	Gas	†Input	Dry	Total	Old Wells Deepened	WILDCAT COMPLETIONS *Oil	Gas	Dry	Total	ALL COMPLETIONS This Week	Last Week	Cumulative This Year	Cumulative Last Year
Alabama	....	....	....	....	....	....	....	....	....	....	....	....	4	2
Arizona	....	....	....	....	....	....	....	....	....	....	....	....	....	2
Arkansas	....	....	....	....	....	....	....	....	....	....	4	....	26	39
California	43	....	....	....	43	....	....	....	11	11	54	33	474	394
Colorado	....	....	....	....	....	....	....	....	....	....	....	....	8	8
Florida	....	....	....	....	....	....	....	....	2	2	2	1	4	....
Georgia	....	....	....	....	....	....	....	....	....	....	....	....	2	1
Illinois	12	....	....	9	21	4	....	....	1	1	26	36	391	350
Indiana	....	....	....	....	....	....	....	....	1	1	1	8	62	73
Iowa	....	....	....	....	....	....	....	....	....	....	....	....	1	2
Kansas	8	3	....	7	18	....	....	1	5	6	24	31	314	406
Kentucky	2	1	....	....	3	....	....	....	....	....	3	4	113	133
Louisiana	11	....	....	3	14	....	3	....	2	5	19	19	203	133
North Louisiana	....	....	....	....	....	....	....	....	....	....	....	5	62	39
South Louisiana	11	....	....	3	14	....	3	....	2	5	19	14	141	94
Michigan	5	1	....	3	9	....	1	....	4	5	14	13	160	127
Mississippi	2	....	....	....	2	....	....	....	3	3	5	5	86	20
Missouri	....	....	....	....	....	....	....	....	....	....	....	....	8	3
Montana	3	2	....	....	5	....	....	1	....	1	6	4	44	55
Nebraska	....	....	....	....	....	....	....	....	....	....	....	....	2	7
New Mexico	9	....	....	3	12	....	....	....	....	....	12	7	114	94
New York	15	....	10	....	25	....	....	....	....	....	25	25	200	264
Ohio	4	....	....	1	5	....	....	....	....	....	5	3	142	179
Oklahoma	19	1	....	5	25	2	1	....	1	2	29	43	512	325
Pennsylvania	27	3	15	....	45	....	....	....	....	....	45	52	561	608
Tennessee	....	....	....	....	....	....	....	....	....	....	....	....	....	3
Texas	86	7	....	25	118	3	5	3	13	21	142	128	1,557	1,126
E.Tex.Bor. Co.'s	1	2	....	....	3	....	....	1	....	1	4	7	20	4
E. Texas Field	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Rest of E. Texas	3	....	....	1	4	....	....	....	1	1	5	3	46	61
North Texas	7	....	....	8	15	....	....	....	....	....	15	23	339	259
W. Central Tex.	5	1	....	2	8	1	....	1	1	2	11	5	81	82
West Texas	30	1	....	6	37	....	....	....	3	3	40	34	413	304
Tex. Panhandle	3	2	....	1	6	....	....	....	....	....	6	14	133	40
G. Coast, Upper	12	....	....	3	15	2	1	....	3	4	21	13	158	97
G. Coast, Lower	19	1	....	3	23	....	4	1	4	9	32	17	235	182
Southwest Texas	6	....	....	1	7	....	....	....	1	1	8	9	112	77
S. Central Tex.	....	....	....	....	....	....	....	....	....	....	....	3	20	19
West Virginia	9	....	....	....	9	....	....	....	....	....	9	23	170	207
Wyoming	....	....	....	....	....	....	....	....	....	....	....	3	35	35
Total U. S.	255	18	25	56	354	9	10	5	43	58	421	443	5,193	4,596

* Includes distillate wells. † Includes salt water disposal wells.

Nemaha Ridge Strike

Map shows location of Cities Service Oil Company's Mariner 1, NW NE NW 6-22n-3w, Garfield County, Oklahoma, which marks the discovery of a major oil pool along the Nemaha Ridge trend. The strike has been given the name of the New Garber field and is located about 2 miles north of the old Garber pool. Mariner 1 had initial production of 2500 barrels of 41.5 gravity oil in the first 24 hours, plus 2 million cubic feet of gas from the Arbuckle lime zone between 5247-97 feet, total depth. The well also tested 10 million cubic feet of gas in the upper Wilcox zone.

was drilling below 1015 feet. Mississippi lime top was logged at 957 feet.

Lee Fox's Fee 1, SE SE SW 12-51n-35w, also in Platte County, was shut down at 670 feet.

Putnam County: Dan McLaughlin's Johnson 1, SE SW 14-65n-21w, wildcat a mile east of Terre Haute, had tools on location and was waiting on fuel. It will be an Arbuckle test.

Kansas

Pool Opener Likely Near Rainbow Bend West Field

Pool opener likely a mile west of Rainbow Bend West field in Sumner County; Drach field given mile extension; Stanolind test may extend Hugoton gas pool 19 miles; wildcat north of Whelan logs oil show in lime zones; Comanche County wildcat reports gas show in Mississippian.

Sumner County: After shooting the Bartlesville sand with 10 quarts at 3269-80 feet, El Dorado Refining Company appeared to be giving the area a mile west of the Rainbow Bend West pool a new producing zone at Patterson 1, SEC 23-33s-2e. Following the shot 1000 feet of oil rose in the hole and operator planned to set a second shot before completing the wildcat.

Stafford County: W. P. Faulkner's Haulman 1, NE NW NE 11-22s-13w, extended the Drach pool a mile to the north after completion as a 16-barrel daily pumper. The well was producing considerable salt water. Correlated with wells in the Drach pool the Arbuckle appears to be a few feet higher than nearest production. Pay was logged from 3739-57 feet. The strike has been called Drach Northwest.

Meade County: Stanolind Oil & Gas Company continues testing Adams 1, SEC 8-35s-30w, 19 miles east of the Hugoton gas pool with prospects that it will prove a long eastern extension. The wildcat is on a 90,000-acre block and had been drilled "tight". Drill-stem test in the Mississippi lime between 5858-83 feet flowed an estimated 4 million cubic feet of gas daily with the tool opened 40 minutes. Previous tests from 6300 to 7716 feet had no oil shows and operator was preparing to drill-stem test a zone between 6285 and 6300 feet.

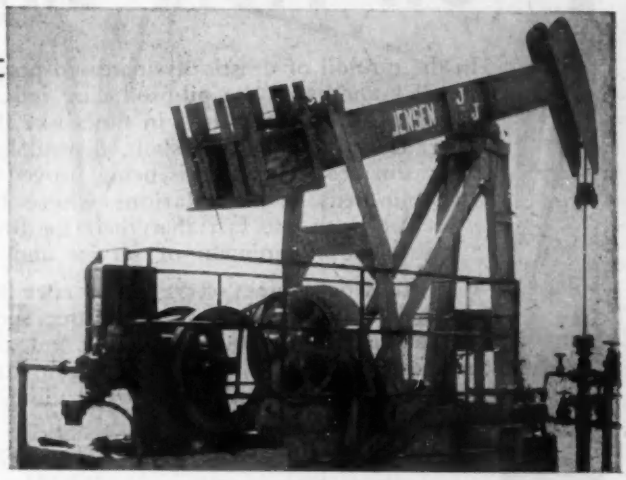
Barber County: Good oil shows were reported and pipe has ben set for production test at Stanolind's Chain 1, SE SE NE 7-31s-11w, 2½ miles north of the Whelan pool. Shows were logged in the Mississippi and Viola lime zones. Pipe was landed at 4850 feet. The Arbuckle runs normal with near dry holes and producing wells on the northern edge of the Whelan pool.

Comanche County: United Carbon Company's Boisseau 1, CSE NW 27-31s-18w, logged a good gas show on drill-stem test of the Mississippi lime between 5118-47 feet. With tool open 30 minutes the well made considerable gas and when tool was laid down it had 25 feet of gas-cut mud. Mississippi was topped at 5115 feet, Viola at 5475 feet, and the wildcat was drilling below 5670 feet.

Davies, Boyd to Speak

Ralph K. Davies, Deputy Petroleum Administrator for War, and W. R. Boyd, Jr., president, American Petroleum Institute, will address the wartime conference of the Pacific Coast District of the American Petroleum Institute at the Biltmore Hotel, Los Angeles, March 29.

What is the sensible way to equip a well?



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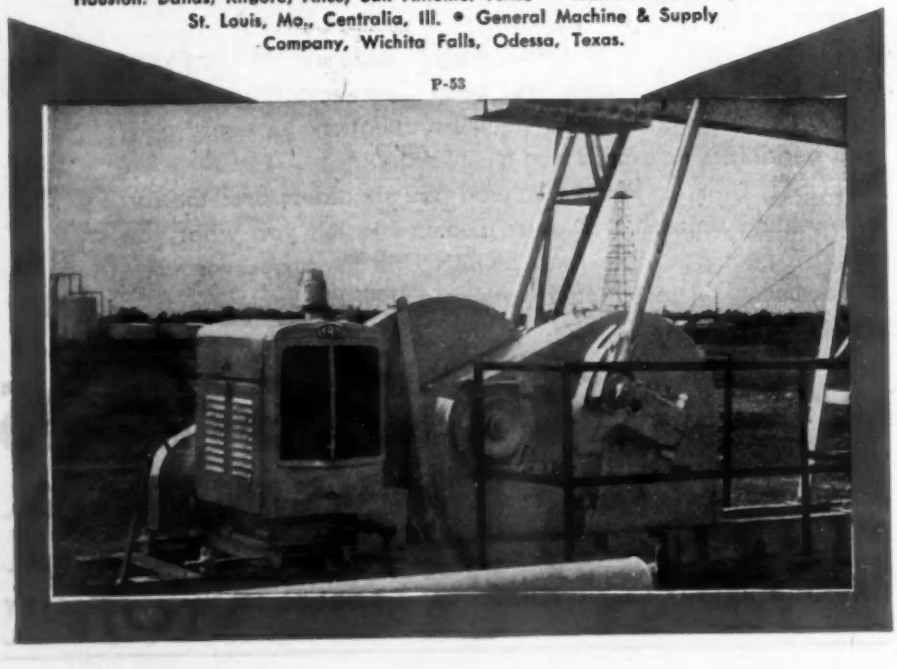

New Mexico

Wildcat in Lea County Flows High-Gravity Oil

Eastern Lea County wildcat flows high-gravity oil from the Glorietta; county has 4 projected Ellenburger tests; deep gasser completed in Barker area, San Juan County.

San Juan County: Southern Union Gas Company's Barker Dome-Ute Reservation 9, SE NW 21-32n-14w, offsetting dry gassers in the 2400 and 3200-foot sands, was completed with rated flow of 40,000,000-foot daily flow from 8400-foot perforations opposite the Paradox zone in Basal Pennsylvanian. The well was drilled to schist at 9466 feet. The company has authorized its second test for the deep gas zone, with location a mile east. The gas is marketed by the company's system that serves the Albuquerque territory.

Lea County: Gulf Oil Corporation's Paddock 1, C SW SE 1-22s-37e, 1½ miles east of the Penrose regular-Permian area and 3¼ miles north by west of its Drinkard area discovery in the Clear Fork, flowed at a rate of 16 barrels of 38-gravity oil hourly with 392,000 feet of gas daily when drill-stem test was run at 5150-5288 feet in Glorietta.

Paddock 1 was drilling at 5435 feet to explore the Clear Fork before running pipe for completion. Gulf Oil Corporation's Gutman 1, north offset to its Drinkard strike, was showing for a small well, having flowed 30 barrels of 39-gravity oil with 4 percent water on 1-inch choke while testing results of acid treatment of Clear Fork perforations at 6439-6476 feet. The gas volume was rated at 1,500,000 feet daily.

The company's State-Andrews 1, 1⅛ miles southeast of this Clear Fork area, logged additional porosity and saturation at 7210-7332 feet that returned 1450 feet of oil and gas-cut mud, and drilling was halted at 7400 feet to set pipe.

Ellenburger Tests: Phillips Petroleum Company's State-Lea-Mex 4, Maljamar area, was drilling at 10,940 feet without shows in the lower zones. Stanolind Oil & Gas Company's Jones 1, 3¼ miles southeast of the Hobbs field, was drilling lime at 7650 feet. In the Penrose field, Neville G. Penrose-et al's Federal-Penrose 1, C SE NW 9-22s-37e, was fishing at 3522 feet.

West Texas

Andrews Discovery Makes Good Flow After Acid

Clear Fork oil discovery in Andrews County makes good flow after acid; water level reached by Devonian extension, or discovery on same trend; disappointments noted in TXL field, Ector County, while dual completions slated for nearby Wheeler-Ellenburger field.

Andrews County: Sun Oil Company's Martin 1, C SE SE PSL 17, Block A-41, and 2 miles northwest of the West Andrews pool, flowed 33 barrels of oil hourly on preliminary test through ¼-inch choke after using 6000 gallons of

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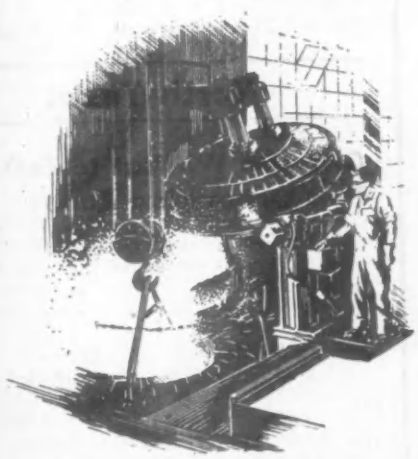

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acid in open hole opposite Lower Clear Fork broken pay at 6850-7036 feet.

Stanolind Oil & Gas Company's University 1-P, 3 miles south by east of nearest Fullerton-Devonian production, tested first water at 8805-feet, followed by an abundance of sulphur water at 8828-55 feet. The hole will be plugged back to try for completion in comparatively thin Devonian oil-saturated lime section, topped at 8760 feet, or 339 feet low. University 1-P probably involves a new pool rather than an extension. Magnolia Petroleum Company's Martin 1, 2 miles south of the latter project and a prospective producer in the 8700-foot Devonian, entered the Woodford shale at 9075 feet, and was drilling dry lime at 9391 feet to explore the Ordovician before running pipe. Shell Oil Company and The Texas Company's Ratliff-Bedford 1, 5 miles west by north of a Devonian discovery completion, was drilling dry lime at 9040 feet, having indicated oil production in Devonian, topped at 8780 feet and also from the 7800-foot Permian.

Fullerton Field: Magnolia Petroleum Company's Ralph 1-A, a mile west of production and first Ordovician test for area, entered barren Ellenburger at 10,655 feet, and was drilling Basal Ellenburger at 10,833 feet. Chalmette Petroleum Corporation's Lake Shore 1, between the Union field and the northeast extension of the Fullerton field, reached the water level in drilling to 7637 feet, and may make a small well from perforations near the 7450-7550-foot level in the Clear Fork.

Glasscock County: Phillips Petroleum Company's McDowell-McDow 1, ⅞-mile southeast of a 10,906-foot Ellenburger failure, uncovered a prospective producing zone in the Lower Permian that was not anticipated when drill-stem test at 8364-8470 feet returned sweet gas to surface within 8 minutes, then recovered 180 feet of 39-gravity oil and 240 feet of oil and gas-cut mud. The test was drilling shale at 8590 feet on Ellenburger depth contract, while next probably pay will be in the 9400-foot Crinoidal (Pennsylvanian), which flowed 43-gravity oil by heads when the earlier test set pipe at 9469 feet.

Howard County: Continental Oil Company and Group One Oil Corporation's Settles 1-D-133, offsetting production in the Howard-Glasscock field, was attempting to set 7-inch pipe because of losing returns at 9960 feet in Ellenburger, topped at 9904 feet. No shows have been reported for this zone, although oil production was indicated in the Crinoidal at 8924 feet.

Ector County: Phillips Petroleum Company's T. P. Land Trust-Phillips 1-A, 1¾ miles southeast of the TXL field's discovery, entered the Devonian at 7768 feet, being 45 feet high to discovery, but had not indicated production in drilling and coring to 8012 feet, where drill-stem test was pending. Top of Devonian is 92 feet high to the Rowan Drilling Company's T. P. Land Trust 1, which confirmed a 2⅞-mile southeast extension before landing 7-inch casing at 7969 feet to complete through perforations. Shell Oil Company's Thomas 1-A, ⅞-mile north of the discovery, proved dry on drill-stem test at 8014-73 feet, and was drilling lime and chert 8090 feet.

Winkler County: Sun Oil Company's Wheeler 1, southwest edge of the Wheeler-Ellenburger field, flowed 38 barrels of sweet crude hourly on ¼-inch choke after using 2000 gallons of acid through perforations in Basal Devonian at 8540-90 feet, while bottomed in Ellenburger pay at 10,560-610 feet. The company has made formal application for a dual completion, and if approved it will be the first for the field, which has 8 Ellenburger wells on production.

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North Texas

Grayson Wildcat to Test Two Ordovician Zones

Grayson County deep wildcat cements pipe to test 2 Ordovician zones; Murray pool has big Mississippian producer; first failure recorded by Bateman 2-pay field.

Grayson County: The Pure Oil Company's Little 1-A, Gordonville area, cemented 5½-inch pipe at 9205 feet to test nominal oil saturation and porosity in Basal Simpson and Ellenburger to 9919 feet. If the wildcat fails to produce from the open hole, perforations will be made opposite oil-saturated sand at 9040-54 feet and higher in the Simpson series. Little 1-A is considered the most interesting active prospect in North Texas.

Throckmorton County: Standard Oil Company of Texas and Hanlon & Buchanan's Donnell 3, southwest offset to a dual producer in Murray field, flowed 99 barrels of oil the first hour and increased to 146 barrels the second hour through ¾-inch choke after using 500 gallons of acid in Mississippian at

4489-4502 feet. The flow was killed to perforate opposite Bend lime saturation at 3800 feet which tested 1 barrel of oil, mud and water hourly on preliminary swabbing test after using 3000 gallons of acid.

King County: Humble Oil & Refining Company's Bateman 10, Sect. 100, is the first failure for the area, having used acid without results in the 5300-foot Strawn and also the 3600-foot lime. The company's Bateman 9, south offset to this failure, entered the Bateman lime at 3675 feet and the Strawn at 5339 feet with little prospects for production in drilling to 5370 feet, although pipe has beet set at 3782 feet, to perforate opposite the upper pay. Ohio Oil Company's Ross 2, offset to its Ross Ranch discovery in eastern King County, was drilling chert and lime at 5895 feet to explore the Ordovician. Four drill-stem tests in the Strawn discovery zone between 5305 and 5386 feet assured a successful completion.

East Texas

Smith Tests Due to Set District Depth Records

Falls County wildcat yields salt water flow from Smackover; 2 Smackover projects in Smith County are slated to set new depth records for the district; Camp County wildcat coring the Rodessa series.

Falls County: H. C. Cockburn et al's Gilliam-Cockburn 1, a mile northwest of Stranger, flowed salt water with nominal volume of gas when perforated at 7138-54 feet in Smackover, topped at 7134 feet. Perforations at 7382-93 feet tested dry, while production test was under way from Basal Smackover perforations at 7406-22 feet. Since this wildcat logged 416 feet of Smackover before entering the salt series, and the upper section carries adequate porosity to afford flow of water, it is certain that more prospecting will follow along the Mexia-Luling fault trend. Tests through perforations are due to me bade opposite a porous zone in the Cotton Valley and also the Travis Peak.

Smith County: Phillips Petroleum Company's Englander 1, 3½ miles south by west of its South Tyler field discovery, resumed drilling with heavy rig below 11,112 feet to explore the Smackover. In the Chapel Hill area, Sinclair Prairie Oil Company's Shofner 1, which has the same objective, was drilling shale at 8550 feet. Both tests are due to drill below 13,000 feet.

Camp County: M. E. Davis et al's Shelby 1, Thomas Williams survey, entered the massive anhydrite at 7325 feet, and was drilling dry Rodessa lime and shale at 7510 feet.

Deep Wildcats: Ohio Oil Company's Popper 1, Hunt County Smackover project 2½ miles southeast of Cash, was drilling soft sand at 8005 feet in Cotton Valley, topped at 7016 feet. In Van Zandt County, Lone Star Producing Company's Goode 1 was drilling sandy-shale at 7695 feet in Travis Peak, topped at 7114 feet. The Texas Company's Morse 1, Chandler prospect, Henderson County, was coring hard dry sand at 10,550 feet in Travis Peak, topped at 10,302 feet.

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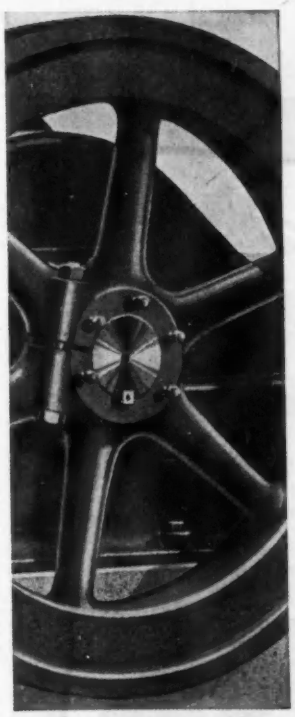

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Southwest Texas

Duval County Receives Gormac Field Extension

Gormac field in Duval County extended; gas tested from a deeper sand in the Randado area, Zapata County.

Duval County: M. M. Miller & Sons' Miller Fee B-1, second test in its new area 9 miles south of Benavides, has been shut in for storage after cleaning itself into the pits through a ⅛-inch choke, at which time it showed pressure of 200 pounds on tubing and 550 pounds on casing.

Gorman & McDermott have requested a new-field allowable and 10-acre spacing pattern for the Gormac field, which produces from the upper Loma Novio sand at 2470-80 feet. In this area Magnolia Petroleum Company has completed Duval County Ranch Company 54, making 88.4 barrels of 23.8-gravity oil daily through a ⅜-inch choke from open hole at 2448-59 feet. At the time application for permit to drill was filed, the well was designated as being in the Government Wells field, but completion was listed as being in the Gormac field.

Jim Hogg County: R. F. Schoolfield is testing Rosa G. Palacios 1 in the Randado field after drilling to a new and deeper sand. The operator set casing on sand logged at 2710-15 feet and is testing an estimated 7,000,000 cubic feet of gas daily.

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Lower Texas Coast

Gas-Condensate Field Opened in Karnes County

Gas-condensate field opened in Karnes County; Brayton field, Nueces County, receives extension; Humble will attempt to dual complete Brooks County discovery.

Karnes County: A gas-condensate field has been opened 2 miles southeast of Coy City by Seaboard Oil Company of Delaware's Sallye Treadwell 1, wildcat which had previously been reported as having good showings in the Wilcox. It was perforated for completion at 7144-47 feet, flowing on 24-hour test a total of 147 barrels of condensate plus 19 barrels of water through a ¼-inch choke with tubing pressure 2050 pounds and gas-oil ratio 14,599-1. Depth is 8005 feet and 5½-inch casing was landed at 7920 feet. High prices have been paid for open acreage in the vicinity.

Magnolia Petroleum Company has made location for Ruth Ingram 1, another 8000-foot test for the Burnell-Wilcox field.

Nueces County: Kilgore Developers, Inc.'s W. S. Morgan 1, originally carried as a wildcat test but now considered an extension to the Brayton field, has been completed through perforations at 7330-38 feet, flowing a potential of 221 barrels of 37-gravity oil daily through a ⅛-inch choke with tubing pressure 1200 pounds and casing pressure 1300 pounds. Total depth is 7958 feet with casing at 7954 feet.

Southern Minerals Corporation has made location for A. M. Stone 1, wildcat a mile west of Petronilla on a 320-acre lease in the Rogers and White subdivision of the Hoffman Petronilla Ranch, to drill to 6500 feet.

Brooks County: Humble Oil & Refining Company is preparing to try a dual-completion in Dan Sullivan 1, recent discovery for the Maraposa field southeast of Falfurrias. Original completion was in perforations at 8537½-45½ feet, and new perforations were made at 7740-50 feet, where attempts will be made for the other producing zone.

Upper Texas Coast

Phillips' Record Depth Well Below 16,650 Feet

Phillips Petroleum Company still drilling in its record breaking Brazos County well; Skelly Oil Company and associates complete gas-distillate discovery east of Bay City; disappointment has been registered in Navarro's interesting Woodbine test in Trinity County.

Trinity County: Navarro Oil Company's Edward R. Bolton 1, which appeared for a while as the opener of a new trend along the upper part of the coastal area, has failed to produce from the Woodbine and is being abandoned after finding the sand too tight to produce commercially at 10,507 feet. Last week it was acidized with 2000 gallons without appreciably increasing the rate at which the oil came into the hole, and operators came above the Woodbine for

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a test of the Sub-Clarksville. A bridge plug was set at 9888 feet and the pipe was perforated with 110 shots from 9770-9888 feet after which a 2-hour drill stem test was made which recovered 2560 feet of mud and water cut with oil, and 1860 feet of salt water.

Interest was aroused when the well showed 5364 feet of oil from the Woodbine during an 8-hour drill-stem test, but subsequent attempts to complete have failed. There seems little doubt that it has established a new trend for exploration, having found the Woodbine sands developed much farther south than had been supposed, and other wells probably will be drilled soon in search of better porosity.

Brazos County: Although still holding drilling information rather closely, Phillips Petroleum Company's Fanny Schoeps 3, in the Millican area, is reliably reported to be drilling below 16,650 feet, more than 400 feet below the previous world's record depth.

Matagorda County: Skelly Oil Company, Tide Water Associated Oil Company and Stanolind Oil & Gas Company's Hardy & Horn 1, discovery well for the East Bay City area, has been completed at the point of latest perforations, and is now shut in due to lack of outlet for the gas. A drill-stem test was made with casing perforated at 10,117-123 feet, using ⅜-inch choke at top and two ⅜-inch chokes at bottom. It produced at the rate of 52 barrels of 41.5-gravity water-white condensate and 7,203,400 cubic feet of gas daily, with flowing pressure at top 2500 pounds. Gas-oil ratio was figured at 137,760-1. Following this test perforations were made from 10,117 feet on up to 10,095 feet, and tubing run for final completion. It was shut in immediately after cleaning into the pits.

Harris County: Magnolia Petroleum Company has spudded another deep test in northwestern Harris County, near the old Hockley Dome. Its Warren Ranch 2 is waiting on cement after setting conductor pipe to 73 feet. This well is scheduled to 10,000 feet, and is situated just 1000 feet southwest of the Warren Ranch 1, abandoned at 7754 feet

Humble Oil & Refining Company's Hutcheson 9, deep test at Clear Lake field, is delayed by a fishing job at total depth 11,740 feet in shale, and was washing over drill pipe at latest report.

San Jacinto County: Navarro Oil Company's Foster Lumber Company 2, second well in the Cold Spring field, and southwest of discovery, was drilling late in the week below 7105 feet and should be running electric log soon. Wilcox sand was found at 7900 feet in the discovery.

Montgomery County: Pan American Production Company's L. E. Posey 1, in the Pinehurst area, is preparing for a test of the sand just below 11,000 feet. It was drilled to 11,820 feet after landing 7-inch casing at 11,226 feet, and has made a squeeze job at 11,204-216 feet prior to perforating for the production test. It had a nice sand body showing gas and distillate just above this point.

Pan American has made location for its J. M. Winslow Heirs as a wildcat in the Edwin Allard Survey, between the Pinehurst and the Lake Creek areas. The new well will be 5425 feet northeast of the Posey 1 at Pinehurst, and 8700 feet southwest of the nearest producer at Lake Creek. It will go to 12,000 feet.

South Louisiana

First Gauge Taken on Jefferson Discovery

Gauges taken on discoveries in Beauregard and Jefferson parishes; new wildcats started in several areas; several exploratory tests abandoned.

Jefferson Parish: First complete gauge taken on The California Company's E. P. Brady 1, discovery for the area south of New Orleans, showed the well flowing through a ⅛-inch choke at the rate of 258 barrels of 36.2-gravity oil daily with tubing pressure 1225 pounds and gas-oil ratio 500-1. The casing had been perforated with 42 shots from 9897-9904 feet with total depth 11,035 feet and casing landed at 10,038 feet. The well had been shut down since early in the year following setting of the casing, while operators were completing the leasing of some state water bottoms in the vicinity. After successfully bidding in the property the company has completed the well, holding about 5000 acres in the area. The discovery is 2 miles southwest of Barataria field and 5 miles northeast of Delta Farms field.

St. Landry Parish: Phillips Petroleum Company has announced location for a wildcat in 20-4s-6e, southeast Palmetto prospect. Brewer Neinstedt Lumber Company 1 will be a Wilcox sand test with the formation expected at around 10,500 feet. Several years ago Stanolind Oil & Gas Company drilled a Wilcox dry hole about a mile north of the location.

Lafayette Parish: Magnolia Petroleum Company is moving in equipment for Gustave Bower 1, new wildcat on the northwest edge of Lafayette in 69-9s-4e, scheduled to 12,000 feet.

Beauregard Parish: Magnolia Petroleum Company has made location for Lutcher-Moore Lumber Company A-1, wildcat northeast of the Fields pool which will be in the southwest corner of 19-6s-11w. It is contracted to 12,000 feet with T. G. Markley as drilling contractor.

Magnolia's Musser-Davis Lumber Company 1, discovery for the West Oretta field in the southern part of the parish, has been gauged at 174 barrels daily through ⅛-inch choke with tubing pressure 2150 pounds. Production is from perforations at 8708-12 feet with total depth 9103 feet and 7-inch casing cemented at 8830 feet.

Calcasieu Parish: A wildact location on Louisiana State lands has been made by Arkansas Fuel Oil Company in the extreme western part of the parish, near the Sabine river. The test is to be Louisiana State Lands Lease 521, well 1, and will test formations to 9500 feet. It is 8 miles northeast of Orange and will be northwest of the Vinton field.

Iberville Parish: Humble Oil & Refining Company has abandoned Schwing et al C-1, wildcat on the Bayou Goula prospect, having run electric logging survey to total depth of 11,600 feet with no commercial showings indicated.

Vermilion Parish: Another deep South Louisiana wildcat was abandoned when Humble Oil & Refining Company plugged Louisiana Furs, Inc., 5, in the Pecan Lake area at 12,141 feet.

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North Louisiana

Franklin and Madison Tests Show Promise

Signs of gas or gas-distillate production in Franklin and Madison Parish wildcats; another try to be made in Natchitoches Parish; testing continues at the northwest extension well of Benton gas-distillate field in Bossier Parish.

Franklin Parish: Though results have not yet been determined, American Liberty Oil Company is reported to have tested 50,000,000-60,000,000 cubic feet of gas on a drill-stem test taken from 3545-70 feet in the Paluxy horizon, at J. B. Kny 1, NW 12-16n-8e, and has drilled to 3825 feet with string of 5½-inch casing cemented at 3600 feet. The test is about 4½ miles southwest of Delhi field in Richland Parish.

Richland Parish: Gulf Refining Company may have one of the best producers in the Delhi field when it completes Dot G. Hoover 1, C SE SE NW 21-17n-9e, which extends the field 1 location northwest of the discovery well. Gas sand in the Tuscaloosa was logged at 3192-3211 feet, and saturated Paluxy sand with good porosity and permeability from 3228-62 feet. Total depth is 3367 feet. A 7-minute drill-stem test from 3237-47 feet recovered 660 feet of 40-gravity oil, 30 feet of oil-cut mud and 30 feet of drilling mud with 1900 pounds of bottom hole flowing pressure. Perforations for test in the oil sand will be made this week, a string of 5½-inch casing having been set at 3343 feet. H. L. Woods' dry hole, Ellett Munholland 1, C SE NE NE 20-17n-9e, is only ½ mile northwest of Hoover 1. Woods' well was abandoned at 3732 feet in red shale.

Bossier Parish: J. R. Hayden, Trustee's Ellerbee 1, 3-20n-13w, wildcat 3 miles northwest of Benton field, is drilling below 8562 feet in sandy shale, after taking a 15-minute drill-stem test from 8395-8416 feet, recovering a slight blow in 3 minutes and a 1500-foot water cushion with 150 feet of gas-cut mud from the Davis sand horizon. Three previous attempts at testing failed when packer collapsed. Another test in this horizon will be made.

Natchitoches Parish: Exploratory operations will continue in this area, despite the recent failure of Feazeland Loe's McIntyre 1, NEc 12-13-8w, since the California Company and Signal Oil Company have started work at Rebo Oil Company 1, 1975 west and 664 feet south of NEc 13-13-8w. This test will be a west offset to George Echols' Good Pine 1, which went to 9500 feet without making tests of various horizons carrying showings of oil. Delta Drilling Company et al is reported planning a wildcat in C SW NW NE 33-9n-9w, 3 miles north of Robline on a block of 6700 acres.

Bienville Parish: The Ohio Oil Company is drilling below 3320 feet in Woodward-Walker 1, 31-17n-7w, 15 miles southwest of Arcadia. Production will be sought from the Travis Peak at 7000 feet. Placid Oil Company will seek production from 8000-feet in Nebo Oil Company 2-B, C SW NE 24-15n-7w, in the Lucky area of the parish, and has already started work.

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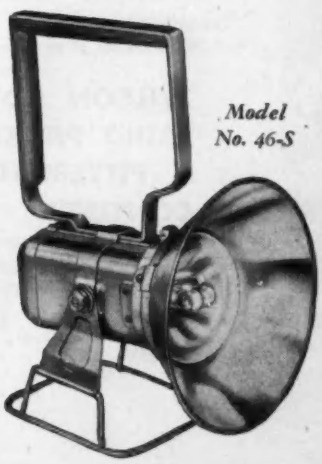

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Arkansas

Southeastern Leasing Play Loses Momentum

Leasing play in southeastern Arkansas losing momentum; little activity at present in wildcat areas.

Columbia County: McAlester Fuel Oil Company will try for Smackover lime production a third time in C. B. Couch 1, C NW SW 11-16s-20w, McNeil area. The company has done considerable geophysical prospecting in the sector, and apparently this test will decide whether an oil field exists there. Latest test drilled by the company was J. C. Luck 1, C NE NE 9-16s-20w, 1 mile west and ½ mile north, which was abandoned at 6950 feet in the lime, though it has a rainbow showing of oil on drill-stem test at 6868-6920 feet.

Union County: Root Petroleum Company has announced location for the second test in the Strong field, discovered in December, 1944. It is Union Sawmill 2, C SW NW 27-18s-12w, south offset to the discovery. Union Sawmill 1 completed for 120 barrels of oil on pump through perforations opposite the Smackover at 6320-30 feet. It began making salt water and required a squeeze job, which has been successfully completed.

Tide Water Associated Oil Company and Seaboard Oil Company of Delaware are rigging up rotary tools and due to spud at G. Griffin 1, C NW SE 33-18s-16w, another Smackover wildcat in the Wesson area.

Miller County: Skelly Oil Company is fishing for twisted-off drill pipe at 5355 feet in Texarkana National Bank 1, SE NW NW 32-16s-26w, across the fault line from production in the Fouke field. Crews suspended drilling at 5340 feet, and three drill-stem tests failed. Productive formations have not been encountered.

Southeastern

Clarke County Test Has Oil Shows in Eutaw Cores

Oil shows obtained from Eutaw cores in Clarke County, Mississippi, test; Mallalieu field discovery offset is indicated pumper; high water interferes with operations.

Clarke County: A. B. Irion, et al's Long Bell Lumber Company 3, 14-2n-16e, is shut down waiting on orders at 4205 feet. The well had shows of heavy black oil in the Eutaw cores, and later swabbed heavy black oil and salt water from perforations at 3755-73 feet and 3844-62 feet.

Charles E. Walters' M. P. McClellan 1, wildcat in 4-10n-9w, was rigging up.

Jasper County: Sinclair - Wyoming Oil Company's W. A. Bethea 1, C SE NW 12-1n-12e, outpost 2½ miles northwest of production in the Heidelberg field, recovered 1900 feet of mud cut with oil and gas in 7 hours from a drill-stem test with packer at 4974 feet. Tubing was run and well swabbed at 6-hour intervals. About 2 barrels of salt water with oil shows were recovered on each run. Well is now drilling below 5000 feet.

Jeff Davis County: Gulf Refining Company's V. G. Gholar 1, 27-9n-19w, in the Gwinville field, has recovered gas and condensate from 3 drill-stem tests made at 8366-76, 8398-8406, and 8414-26 feet. Recovery on a test was approximately 5 to 8 gallons of distillate and an unestimated amount of gas. Bottom hole pressure of 3050 pounds indicated a considerable volume of gas. The interesting factor in the well is that gas condensate was found below the water level in the Mullins 1, discovery well in the field. The inconsistency of water levels in this area is expected to require extensive coring in various tests.

Jefferson County: Humble Oil & Refining Company's M. R. Smith 1, Tuscaloosa test in 12-9n1e, recovered only salt water and mud on drill-stem test at 5209-25 feet. Cores taken further up the hole, at 3681-85 feet, showed sand with gas, and cores taken at 3685-89 feet showed light oil stains. Depth at last report was 5660 feet.

Tide Water Associated Oil Company's B. F. Buie 1, 12-8n-4e, is moving in rig.

Jones County: Ginther, Warren & Ginther's Mrs. Florence Mitchell, 23-6n-12w, has had no shows in cores at 7209-14 feet and 7291-96 feet.

Lincoln County: The California Company's M. R. Douglas 1, 11-6n-8e, east offset to the Mallalieu field discovery, is indicated as a pumping well. It would not flow on drill-stem test with perforations at 10,552-10,580 feet, and with fluid level about 1900 feet from top was swabbed at rate of 13 barrels of oil per

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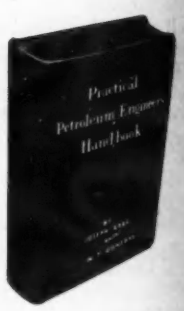

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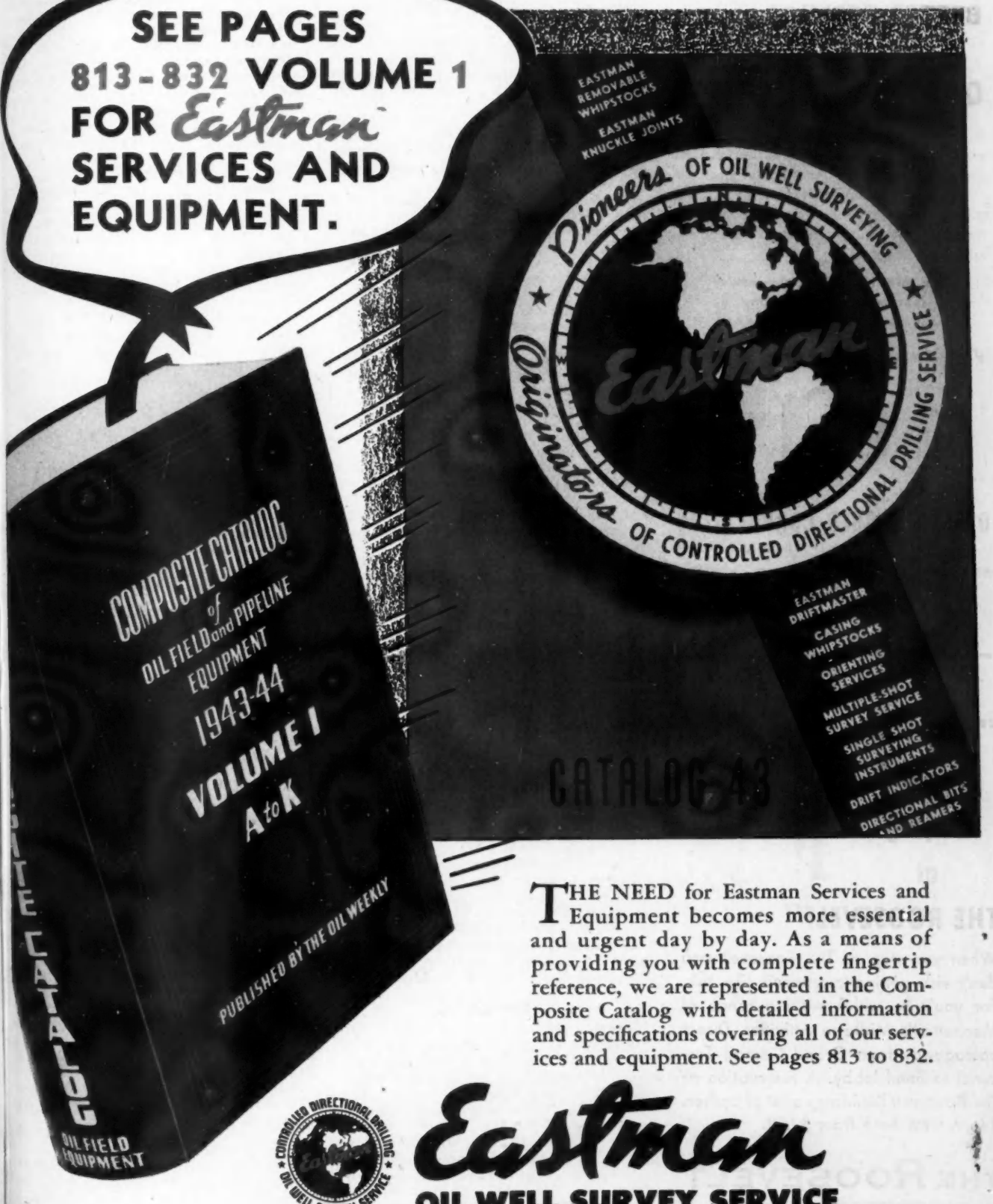

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hour, cut 6 percent with basic sediment and water.

Sharkey County: The British-American Oil Producing Company's F. B. Houston Estate 3, 10,000-foot test in the old Cary field, has been shut down temporarily, due to high water. Total depth was 7863 feet with no shows reported.

Warren County: Magnolia Petroleum Company's Feld Estate 1, 3-16n-4e, is drilling below 7200 feet. Cores taken in the Sparta and Wilcox horizons at 1696 feet and 3388 feet, respectively, had no shows.

National Associated Petroleum Company's Jeff Davis Heirs 1, 23-14n-1e, has been temporarily abandoned due to high water. Cores taken at 3226-44 feet recovered sand with slight odor and stain. Total depth was 5401 feet.

Wayne County: Gulf Refining Company's Lillie M. Johnston 1, 34-10n-9w, northwest outpost in the Eucutta field, is drilling in chalk below 3950 feet. If this well has any shows above the Eucutta water level the Morrison sand must have porosity, or faulting must occur within the chalk section. So far few wells at Eucutta have had sufficient porosity in the Morrison zone to be considered productive.

Yazoo County: Southern Natural Gas Company's Gammill Investment Company 1, wildcat in 5-9n-4w, is shut down waiting on orders after swabbing salt water and 14.6-gravity oil from 48 perforations at 6766-78 feet. Shows of oil and gas have been reported in tests taken at 7461-74 and 6605-17 feet. Pump may be installed.

Florida

Two failures in Florida's wildcatting campaign are offset by new work planned. Humble Oil & Refining Company abandoned State 1, 30-55s-36e, Dade County, in lime at 11,789 feet. The Pure Oil Company temporarily abandoned C. C. Hopkins 2, C NW NW 21-6s-9w, Gulf County, in hard shale at 7255 feet. Pure's geologists are correlating logs of C. C. Hopkins 1 and 2, with the idea of staking another location in the area.

Highlands County: Humble's G. C. Carleton 1, C SW NE 34-38s-29e, is drilling below 4494 feet in hard lime.

Collier County: Humble's Gulf Coast Realties 4, 20-48s-30e, is drilling hard lime and anhydrite at 9711 feet, but has encountered no oil shows.

Charlotte County: Humble is building derrick for another wildcat, Lownes-Treadwell 1, C SW NE 17-42s-23e.

Georgia

Interest still centers on Tropic Oil Company's Gibson 1, wildcat 4½ miles southwest of Lyons in Toombs County, most promising test in Georgia, which has still not completed a producer. The company is withholding information and keeping out all but the rig crew. Report states, however, that a core taken from a sand hit at 2668 feet carried oil stains and was more promising than the previous one logged at 2162 feet. Present depth is 2717 feet, with test shut down for rig repairs. Royalty prices for the area have soared.

Echols County: Hunt Oil Company is drilling below 2873 feet in shale in Superior Pine Products Company 1, in the southwest corner of Land Lot 317, Land District 13. The test, projected to 4500 feet, is not believed to have encountered oil showings to present depth.

Atkinson County: Sun Oil Company is reported planning to drill another wildcat approximately 4 miles northwest of its Doster-Ladson 1, in Land Lot 71, Land District 7, which was abandoned last month at 4296 feet.

Wayne County: Harry Byers was working to cement bottom joint of 12½-inch casing at 365 feet in Dean 2, Land Lot 127, third Land District. The test will change to rotary tools as soon as surface casing is set through cavities.

Alabama

Glenn D. Rose Oil & Gas Company's wildcat, Ulysses 1, 6-13s-6w, Walker County, is drilling below 660 feet. J. L. Cates' J. A. Steele, Tr. 1, NW SW 6-21n-2e, Greene County, has moved in material. These are the only wildcats active.

Choctaw County: Hunt Oil Company's W. S. Scruggs 2, 33-11n-4w, Gilbertown field, has run electric log at total depth of 3492 feet and is now waiting on pump. Same operator's C. H. Utsey 1, 33-11n-4w, is waiting on pump after running 2-inch tubing to total depth of 2712 feet, as in the case with the company's Maggie Utsey 1, 33-11n-4w, at total depth of 3483 feet.

H. L. Hunt has made a new location in the field, W. J. Trice 5, in 34-11n-4w.

Rocky Mountain Area

Well Tests 148 Barrels Hourly in South Elk Basin

Continental Oil Company opens pool that tests 148 barrels per hour at South Elk Basin, Park County, Wyoming; Sheldon Dome in Fremont County, Wyoming, may be new discovery; new zone may be proven at Wilson Creek, Rio Blanco County, Colorado.

Wyoming

South Elk Basin: South Elk Basin has been added to the list of new discoveries. In a drill-stem test in Continental's Ida Goodstein 1, NE SE SW 20-57n-99w, from 6963-6995 feet, the hole filled with 4875 feet of clean oil, 28-gravity, in 15 minutes and production is rated at 148 barrels per hour. The flowing pressure has been checked at 1550 pounds.

Twenty-five feet of saturated cores were recovered from the Tensleep sand from 6963-6995 feet and plans are to core ahead to further test the zone, which may be 150 feet thick. Continental has a unitized block of 5760 acres in the South Elk Basin area, which has a fair amount of closure as determined by geophysical work. In the main Elk Basin field, 3 miles north of the discovery, the Tensleep sand produces from 5650 feet. The South Elk Basin well is 1300 feet deeper to the same sand.

At Sheldon Dome in Fremont County, The Carter Oil Company-Kerlyn Oil Company's Tribal 1, NE NE NE 16-5n-2w, has cored ahead after testing from 6265-6280 feet, where 45 feet of estimated 38-gravity oil was recovered and 135 feet of oil-cut mud. Additional saturation has been encountered and a second drill-stem test will be taken from 6330 feet.

Rio Blanco County: At Wilson Creek, The Texas Company-California Company's Unit 20, 34-3n-94w, entered the Weber sand at 8230 feet and some streaked saturation was found at 8294-8339 feet. The packer failed in the first

attempt to make a drill-stem test from 8294-8339 feet. Much interest is centered on the outcome of this well as several wildcats are expected to start soon in Northwestern Colorado that will depend on the Weber sand for production.

Stanolind Oil & Gas Company has a new wildcat location at Meeker Dome in Scott 1, C NE SW 20-1n-93w. Material is being hauled in for a test to the Weber sand.

Husky Refining Company's Hagood 1, northwest end of Rangely field, is drilling in saturated Weber sand after setting 7-inch casing on the sand top at 5965 feet. Second deepest drilling well at Rangely is Stanolind's Rector 1, NE SE 34-2n-102w, drilling at 5310 feet in Red Beds just above the Weber. Drilling wells in this field now number 12.

California

Kirby Hill Gas Field in Solano County Extended

Shell Oil Company extends field in Solana County; Mountain View field in Kern County extended.

Kern County: J. I. Listle's Canfield 1, in 12-30-28, is a small extension to the north of the Mountain View field. The well was completed March 11, flowing 120 barrels of 22-gravity oil in the first 6 hours. Present production is 150 barrels a day of 22.1-gravity oil, 3.6 percent cut. Total depth is 5222 feet with 7-inch casing cemented at 5170 feet.

Grubb & Hawkins acquired abandoned Happold-Amalgamated 2 in 15-25-24, southeast of the Trico gas field in Kern County and will make further tests. The hole had been drilled to 11,220 feet with 7-inch casing cemented at 10,200 feet. Olcese and Vedder zones will be tested.

Orange County; General Petroleum Corporation has abandoned Heath 2, which it took over from another operation. Depth was 12,088 feet. This well was in 34-38-11w. The company is now starting Librom 1, 21-38-38, also in the Buena Park Area. Heath 1 is a small producer, but the company, with ample leases, is not discouraged.

Imperial County: Oil companies for years have been trying for production in Imperial County, one of the counties with the lowest sea level. The Texas Company's Grupe-Engrebretson, 1, Holtville area, total depth 9014 feet, is now washing over fish at 2669 feet, while Amerada Petroleum Corporation's Veysey 1, Brawley area, total depth 5118 feet, is cleaning out to drill after a fishing job and testing.

Solano County: Shell Oil Company extended its recently discovered Kirby Hill gas field ½-mile southeast with the completion of a second producer, Lambie 2, for 14,000,000 cubic feet of gas per day. The Kirby Hill field, 15 miles southeast of Fairfield, was the first California discovery of 1945. Successful completion of Lambie 2 indicates the field may add substantially to California gas reserves, while providing an additional source of gas to meet the demands of war industries in the Bay Area.

Shell is currently rigging up Lambie 3 a mile northwest of Lambie 2.

Illinois Basin

Indiana Has Second Gas Discovery of Month

Indiana has second important gas discovery of month; wildcat planned in Mattoon city limits; Jasper County, Illinois, wildcat completed.

Posey County: J. T. Peek's Reinecke 1, SW SW NE 12-6s-13w, a mile west of the Bufkin pool, is Indiana's second important gas discovery of the month. With about 400 feet of 8-inch casing in the hole, gas was tapped in Pennsylvanian sand at 770-780 feet and casing was blown from the hole.

Operators were trying to check the flow of gas, which was estimated at 2 to 4 million cubic feet daily. Cement probably will be pumped in the hole.

A few weeks ago Rhodes and others discovered a 10-million cubic foot well at Douthitt 1, 30-7s-7w, Spencer County, 3 miles south of the Hatfield oil pool.

Illinois

Coles County: Fred Kuehne, head of a furniture manufacturing company at Mattoon, is preparing to drill a wildcat on property adjacent to his factory, approximately ½ mile north of production in the growing Mattoon pool. It will be the first test within the city limits.

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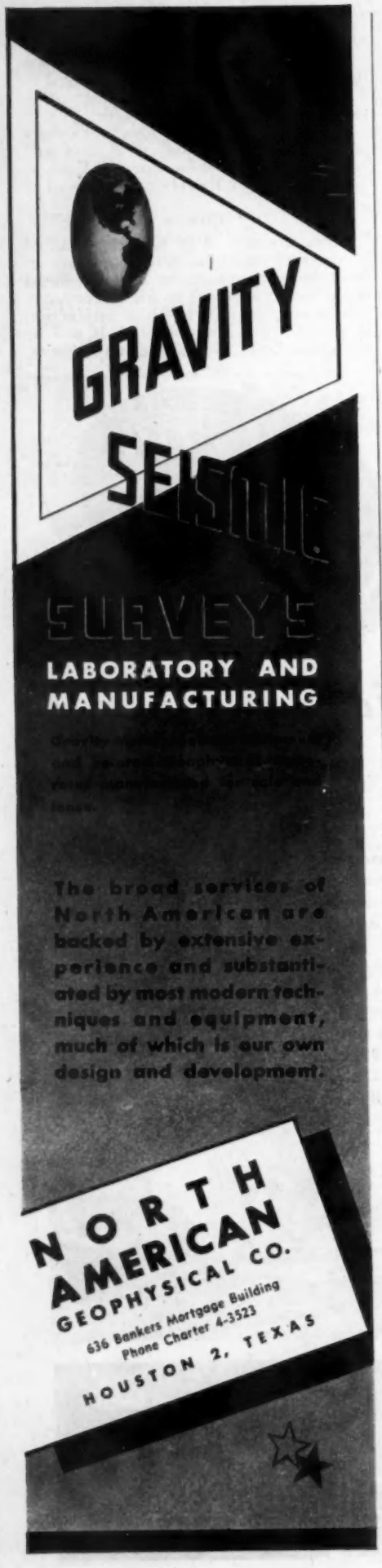
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Tentative location is Kuehne 1, E½ SE NE 23-12n-7e. Drilling is expected to get underway by April 1.

Edwards County: Aetna Oil Company's Greathouse 1, SW NE NW 23-1n-10e, discovery 3 miles southwest of the Salem pool, is making about 80 barrels per day after initial test of 150 barrels from O'Hara lime at 3247-54 feet, following 5000 gallons of acid.

Jasper County: The Pure Oil Company's Dohm 1, NE SE SW 34-7s-10e, a successful wildcat in which pay was discovered a few weeks ago, has been completed in McClosky lime at 2669-72 and 2718-25 feet, for initial production of 160 barrels of oil in 24 hours.

Clay County: Magnolia Petroleum Company's Cammon 1, NE SE NE 16-4n-9e, 5 miles east of Louisville in wildcat territory, is testing McClosky lime at 2960 feet after the well was given 1000 gallons of acid.

Michigan

Fork Field Area's First Deep Well Given Test

On test for 36 hours, Sun Oil Company's Denslow 1, S½ SE NE 2-16n-8w, Fork field, Mecosta County, averaged 2 barrels of 54.8 gravity oil per hour at a rate of 1,000,000 feet of gas per day from the Richfield section of the Detroit River Monroe. It is the first deep test for the district, being bottomed at 5198 feet and perforated at 4993 to 5025 feet with 97 shots.

On an open test immediately after perforating and a 1000-gallon acid treatment, the well flowed up to 10 barrels of oil per hour at a rate of 3,450,000 feet of gas per 24 hours.

The Fork field, which covers approximately 2500 acres, heretofore has produced oil only from the Dundee section at an average depth of 3800-3900 feet.

The Richfield is being produced in 3 recognized commercial fields in the northern part of Michigan and has produced on isolated wells in a number of other pools. Generally recoveries have been low in relation to the depth.

Spacing Rules Hearing

Rules governing spacing of gas-condensate wells in Mississippi's six producing fields will be considered at a public hearing in Jackson scheduled by the oil and gas board for May 1.

WESTERN CANADA

Tax Concession Extension Stimulates Exploration

Tax concession extended; deep Alberta Foothills test scheduled; Sun initiates study of million-acre holdings.

The Dominion Government has extended to the end of this year the tax concessions granted in 1943 and 1944 to stimulate exploration for oil in Canada. The concessions had been slated to expire March 31.

The extension is expected to serve as go signal for what may be the largest oil exploration program in Canadian history.

Imperial Oil, Ltd., and Shell Oil of Canada have joined forces for the drilling of another deep Alberta Foothills anticline . . . the Stolberg structure, where Madison Limestone objective is expected at around 10,000 feet. Initial well, Imperial-Shell-Stolberg 1, has been staked in lsd 3 22-41-14w5th, near the center of a ,jointly-held 199,840-acre block. Location has been staked on the basis of a seismograph study of the area, recently completed by a Shell party, following Imperial geological investigation of the block.

Sun Oil Company, Philadelphia, is expected to spend upwards of $500,000 this year on investigation of its million-acre holdings in Canada. Initial deep test (from 10,000 to 15,000 feet) on the 5000,000 acres in northwestern Nova Scotia geologized in 1943-44 is to start this spring. To be drilled with heavy rotary, it will be on the Minudie Anticline a few miles south of Amherst, Nova Scotia. Objective will be the Albert Shale series of the Mississippian, now producing gas and oil (depths 1900 to 3100 feet) in the Stony Creek field of New Brunswick.

A Sun seismograph party will arrive in Alberta from Texas about April 1 to initiate study of the 500,000-acre reservation recently acquired by the company on the Southern Alberta Plains. The block's eastern boundary is 15 miles west of Standard Oil Company of California's Devonion dolomite oil strike at Princess.

Norcanols Oil & Gas Company, whose principal backer is Imperial Oil, Ltd., has staked another deep test in Southern Saskatchewan. The well, Norcanols-Pennant 1, is to be drilled immediately in lsd 4 14-18-16w3rd, on the southwest Saskatchewan Plains, 21 miles northwest of Swift Current. Heavy duty rotary from Imperial-Swift Current 1, being abandoned at 7890 feet, will be used.

Standard has started an east extension test to the Conrad area Ellis sand pool opened in mid-1944. Mid-Continent Oil & Gas Company and East Crest Oil Company have started a north extension test to their recent Conrad Ellis sand discovery. Standard Oil of British Columbia and Nassau Explorations, Ltd., will start a southeast extension test to the West Taber area Taber sand pool discovered late last year. These 3 new ventures are on the Southeast Alberta Plains.

Norman Explorations, Limited, Imperial Oil Company subsidiary, will continue wildcat operations in the Mackenzie River Basin. It will maintain in the area at least 2 surface geological parties, 1 seismograph party and 1 gravimeter crew. Rigs which have been engaged in drilling and servicing work in the Norman Wells pool will probably remain in the area and be used as needed.

Norman Wells was discovered by Imperial in 1919, but largely developed since 1942 with the backing of the United States Army. Wells are shallow (1700-2300 feet) Devonian shale producers. The field covers about 5000 acres, partly under the Mackenzie River, and, with limits of the pool now defined, has a productive potential of 5000-6000 barrels per day. In 1944 it produced 1,179,693 barrels of crude, 9 times the 1943 recovery of 180,953 barrels. Total oil output from 1919 through 1942 was 143,049 barrels.

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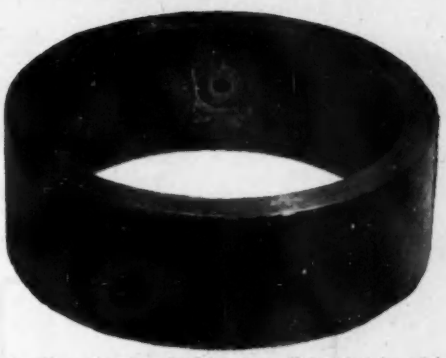
ACTUAL PHOTOGRAPHS OF PERFORATED SECTION

Section showing outside view of insert in place. Note lack of distortion of tubing and the perfect fit of the insert within the clean cut hole.



Section showing inside view. Note that insert is driven 1/32" beyond inside diameter of the tubing to allow the tubing to shrink or contract back of the insert and to lock it securely in place.

Section showing the tubing bore at the insert. Note that the tubing is still perfectly round and full opening.

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Representatives: Otis Eastern Service, Inc., Wellsville, N. Y.; Western Pressure Control, Los Angeles and Bakersfield, Calif.
Export Office: 74 Trinity Place, New York City

U. S. Exploratory Completions

CALIFORNIA WILDCATS

Fresno County—Failure: Amerada's Cerini 74-15, 15-17s-19e, Riverdale area, Cret 8249 ft, abnd 8500 ft.

Kern County—Failures: General Pet. Corp.'s Kernlandia 84-16, 16-29s-27e, Fruitvale area, abnd 8117 ft.

Continental's Conoco KCL K-1, 36-11n-20w, Wheeler Ridge area, gray sand, abnd 6160 ft.

Rothschilds-Bender's Anderson 3, 20-29s-21e, Sheep Springs area, Kreyenhagen 4238 ft, abnd 4290 ft.

Rothschilds-Bender's Trust 1, 13-29s-28e, Kern River area, Vedder 4720 ft, abnd 4811 ft.

Western Gulf's KCL-2, 2-12, 35-29s-27e, Fruitvale area, abnd 4551 ft.

Los Angeles County—Failure: D. D. Dunlap Trustee's Capital 3, Torrance area, sands tight, abnd 6072 ft.

Orange County — Failures: General Pet. Corp.'s Heath 2, 34-3s-11w, Buena Park area, abnd 12,088 ft.

Seacoast Oil's Wardman 1, 3-3s-10w, Brea Canyon area, shale and cong, abnd 5824 ft.

San Joaquin County — Failure: Honolulu Oil's Brack Comm. B-1, 29-3n-6e, Lodi area, abnd 5004 ft.

FLORIDA WILDCATS

Dade County—Failure: Humble's State 1, c ne nw 30-55s-36e, abnd 11,789 ft.

Gulf County—Failure: Pure's C. C. Hopkins 2, c nw nw 21-6s-9w, abnd 7255 ft.

ILLINOIS WILDCAT

Richland County—Failure: Pure's Stiff 1-A, sw se se 33-5n-10e, abnd 3057 ft.

INDIANA WILDCAT

Vanderburg County — Failure: Hoffman & Ashland O&R's Gruner 1, nw nw se 6-6s-10w, abnd 1728 ft.

KANSAS WILDCATS

Barber County—Gas Discovery: Lion's Allen 1, nw ne ne 2-30s-14w, Arb li 21 shots 4515-17 ft, flow 6 mln gas, td 4537 ft.

Finney County — Failure: Sinclair Prairie's Ely 1, nwc se 30-21s-28w, Miss 4620 ft, abnd 4866 ft.

Harper County—Failure: Pure's Mayer 1, se nw ne 4-35s-6w, Arb 5406 ft, abnd 5521 ft.

Kingman County — Failure: Kingwood Oil Co.'s Fulton 1, nec 6-27s-7w, Lans 3243 ft, Miss 3922 ft, Arb 4401 ft, abnd 4470 ft.

Sedgwick County — Failure: Stark et al's Overman 1, swc nw 15-26s-1e, Miss 3065 ft, abnd 3083 ft.

Stafford County — Failure: Helmerich & Payne's Asher 1, ne ne se 4-21s-14w, Lans 3309 ft, Arb 3642 ft, abnd 3692 ft.

SOUTH LOUISIANA WILDCATS

Beauregard Parish—Oretta Oil Discovery: Magnolia's Musser-Davis Lbr. Co. 1, 660 s&e of nwc 33-6s-11w, elev 107 ft df, L. Cockfield 8708-20 ft, perf 16 shots 8708-12 ft, low 174 bbls 49.1-gr, 8/64-in, tp 2150 lbs, gor 2420/1, td 9103 ft.

Iberville Parish—Failure: Humble's E. H. Schwing et al 1-C, start nec sw¼ sect 18 go sly alg el sw¼ 660 wly at ra 660 in 18-10s-11e, Bayou Goola area, td 11,600 ft.

Jefferson Parish—Oil Discovery: California Co.'s E. P. Brady et al 1, begin USCGS Station "Perot" go n 80° 56 mins e 6233 to lcn in 2-15s-23e, perf 42 shots 9897-9904 ft, flow 258 bbls 36.2-gr, ⅛-in, tp 1125 lbs, gor 500/1, td 11,035 ft.

St. Landry Parish—Failure: Mid-Continent's John Sonnier 1, 330 fr n&wl s ½ of sect 31-5s-4e, abnd in Cockfield 10,042 ft.

SOUTH LOUISIANA NEW PAY TEST

Jeff Davis Parish—W. Tepetate Discovery: Barnsdall's Jos. Fuselier 3, 4164 n 14° 15 mins e fr swc sect 38 330 at ra ely fr wl sect 38 1416.6 fr well No. 2 on same lse in 38-7s-3w, n offset to Miller 1, disc well, perf 13 shots 9272-76 ft in Miocene, flow 97.56 bbls 52.4-gr, ⅛-in, tp 3750 lbs, gor 12,097/1, td 9312 ft.

MICHIGAN WILDCATS

Gladwin County—Failure: Sun's Ostrander 1, n½ nw nw 15-20n-1, Dundee 3671 ft, abnd 3735 ft.

Osceola County—Failure: Gordon and Americrude's Weston 1, se ne se 22-20n-8w, Dundee 4045 ft, abnd 4147 ft.

Roscommon County—Failure: Freeman Oil Co.'s State B-1, w½ nw nw 7-21n-3w, Dundee 3969 ft, abnd 4046 ft.

MICHIGAN OUTPOST

Arenac County — Failure: Bernhardt and Wicklund's Mutch 1, se ne nw 1-19n-3e, Dundee 2937 ft, so 2961 ft, abnd 3115 ft.

MICHIGAN NEW PAY TEST

Mecosta County—Fork Richfield Dolomite Discovery: Sun's Denslow 1, s½ se ne 2-16n-8w, elev 1177 ft, Traverse 3310 ft, Dundee 3907 ft, Richfield dolomite 4197 ft, pay 5001-17 ft, 48 bbls oil, 1,000,000 gas, td 5198 ft.

MISSISSIPPI WILDCATS

Covington County — Failure: Warren Pet.-Roeser & Pendleton's Joe V. Johnson 1, c se se 9-6n-14w, elev 308 ft, abnd 9322 ft.

Rankin County — Failure: Geo. W. Lyels' I. J. Broom 1, 660 s 330 w nec sw 14-4n-1e, elev 342 ft, jkd and abnd 5846 ft.

Warren County—Failure: Nat. Assoc. Pet. Co.'s Jeff Davis Heirs 1, 2460 s 990 w sec 23-14n-1e, (accretion to sect 23), elev 92 ft, temp abnd 5401 ft.

MONTANA WILDCAT

Liberty County—Gas Discovery: Texas Co.'s C. Cicon 1, ne nw sw 29-36n-6e, 2,630,000 gas fr Ellis-Madison perf 2884-2910 ft, td 3221 ft, pb 2927 ft.

OKLAHOMA WILDCATS

Garvin County—Failure: Harry Culvar's Hill 1, c ne sw 4-2n-1e, McLish sd 3944 ft, abnd 4208 ft.

Oklahoma County — Oil Discovery: Fred Ptak's Owen 1, sw se ne 30-14n-1w, Hunt 5640 ft, td 6350 ft.

WEST TEXAS WILDCATS

Lubbock County — Failure: Norwalk Co.'s Mac Millan 1, c ne se HE&WT Ry. 12, blk D-2, elev 3314 ft, anhy 1780 ft, Yates 2130 ft, li 3130 ft, San Andres 3370 ft, Clear Fork 5750 ft, abnd 6508 ft.

Pecos County—Failures: G. F. Aldrich et al's Johnson-Shell 1, nw nw se T.&St.L. Ry. 36, blk 140, elev 2475 ft, abnd 1812 ft.

Bryce McCandless et al's Cordova Union (Atlantic)-Gulf 1-115, se ne se H&GN Ry. 115, blk 11, elev 2414 ft, Yates 770 ft, San Andres 1612 ft, abnd 1643 ft.

WEST CENTRAL TEXAS WILDCATS

Jones County—Failure: Con-Tex Pet. Corp.'s King 1, 330 ft out sec sect 42, Orphan Asylum Lands, elev 1669 ft, Saddle Creek lime 1865-1898 ft, abnd 2340 ft.

Shackelford County—Gas Discovery: Eltex, Ltd.'s G. R. Davis 1, nw nw nw T&P Ry. 57, blk 13, 2½ mi e of prod, elev 1840 ft, 3,020,000 ft open, nat, fr Hope sd 1800-15 ft.

SOUTHWEST TEXAS WILDCAT

Webb County — Failure: Coastal Refineries'

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A. M. Bruni 1-A, 330 fr sl 1650 fr el blk 48 of Brown subdvn 160-ac lse, abnd 2025 ft.

LOWER TEXAS COAST WILDCATS

Brooks County — Failure: Sun's Mary M. Lasater 2, 2074.6 e of wl 614-ac lse, HE&WT sur 349, 6 mi se Falfurrias, 2000 sw of No. 1 dry hole, abnd 7539 ft.

Fayette County—Oil Discovery: Continental's E. A. Arnim, Jr., et al 1, 330 fr s&el of 30-ac tr 5 out of 372.16-ac lse 330 w of wl of Continental's A. Derry lse in J. S. Menefee- ⅛-Lge, sand 2040 ft, perf 35 shots 2050-59 ft, pump 80.52 bbls 20-gr oil, 0.1% wtr, td 5405 ft.

Goliad County—W. Goliad Discovery: Sun's E. A. Thompson 1, 467 fr wl 12,346 fr swc 3800 fr nwc of 1537-ac lse, Ignacio Guajardo sur, well blew out, prod through dr pipe at 11,149 ft, no perfs, flow 314.64 bbls 44.1-gr, gor 14,272/1, tp 64 lbs, td 11,192 ft.

Hidalgo County—Gas Discovery: La Gloria Corp.'s South Weslaco 1, 467 fr s&wl tr 731 sect 165, 1 mi sw Weslaco, perf 100 shots 7455-85 and 59 shots 7404-20 ft, flow 54,000,000 gas, sitp 2900 lbs, td 8943 ft.

Hidalgo County—Failure: Texas Co.'s Argyle A. McAllen et al 2, 11,040 fr wl 11,875 fr nl 35,996-ac lse, Santa Anita sur, 28,141 n of No. 1 on same lse, abnd 10,400 ft.

Jackson County — Failure: Roxie Wright's E. H. Seidel 1, 330 ne of nw projection of swl of Asbeck tr 330 fr nwl of Seidel tr, Henry Smith sur A-72, abnd 6050 ft.

Nueces County—Failure: Southern Minerals Corp.'s J. B. Butts 1, 467 fr sl 467 fr nwl at ra of blk 11 of F. Z. Bishop subdvn 471-ac lse, Petronilla Rch, abnd 7513 ft.

San Patricio County—Oil Discovery: H. H. Howell's C. A. Maedgen 1, 467 fr nw&nel 204-ac lse, Mathis Rch subdvn blk 4, sand 4160 ft, perf 24 shots 4182-96 ft, flow 26 bbls 36.5-gr oil, 0.33% wtr, ⅛-in, gor 53,000/1, td 5230 ft.

Willacy County—Oil Discovery: Texas Co.'s Yturria Ld & Livestock Co. 5, 660 fr sl sh 3 15,900 fr el 10,913.3-ac lse, Josenarciso Cabosos Gr, 8058.3 sw of No. 1, perf 12 shots 6346-49 ft, flow 91.01 bbls 42.9-gr oil, 9% bs&w, ¼-in, gor 2550/1, td 6985 ft.

UPPER TEXAS COAST WILDCATS

Jefferson County — Failures: Glen H. McCarthy-Texas Co.'s Geo. R. Bauer 1, 420.2 fr nl 330 fr wl G. P. Peterson sur A-598 sect 66 320-ac lse, midway between Winnie and Nome townsites, abnd 10,020 ft.

Shell's McFaddin Tr. 1, 660 fr nely&nwly/1 of N. W. Smith 160-ac sur 7147.2-ac lse, 6 mi w of Port Arthur, temp abnd 9066 ft.

Matagorda County — Failure: Shell's Mrs. Isabell H. Thome 1, start s cor 137.67-ac lse at Live Oak Crk, go 875 ne alg sel lse 660 n at ra 3700 fr nwl 11,350 fr nel G. Pentecost sur, abnd 6832 ft.

Tyler County—S. Hyatt Oil Discovery: Atlantic's Houston-American 1, 660 fr wl 550 fr nl 471.52-ac lse, BBB&C sur, sect 3, elev 138 df, sand 8374 ft, perf 12 shots 8379½-82 ft, flow 399.60 bbls 54.9-gr oil, 0.3% wtr, ¼-in, gor 3850/1, td 9015 ft.

EAST TEXAS BORDER COUNTIES WILDCAT

Panola County — Gas Discovery: McAlester Fuel Oil Co.'s J. B. Hunt 1-A, 565 fr wl 532 fr sl of tr, Wyatt Anderson sur, 4 mi s 2 mi e of Carthage, elev 288 ft, perf L. Pettit 5905-45 ft, flow 2,800,000 gas, td 9022 ft, pb 6250 ft.

EAST TEXAS NEW PAY TEST

Smith County—South Tyler Failure: Phillips' Grelling 1, 990 ft nsl 630 ft wel of 129.3-ac tr, Thomas Price sur A-794, 3000 ft nw of 9900-ft disc, elev 522 ft, Nacatoch 2954 ft, Navarro 2980 ft, Pecan 3593-4150 ft, Austin 4730-4958 ft, Sub-Clarksville 4985 ft, Woodbine 5258 ft, Georgetown 6167 ft, Goodland 7385 ft, Paluxy 7514 ft, Glen Rose 7867 ft, 1st anhy 8895 ft, massive anhy 9290-9518 ft, Pettit 10,210 ft, Travis Peak 10,420 ft, abnd 10,885 ft.

WESTERN CANADA WILDCATS

Southern Saskatchewan—Swift Current: Imperial Oil's Imperial-Swift Current 1, lsd 11 20-13-13w3rd, abnd 7890 ft.

South Alberta Plains—Endon: McColl-Frontenac Oil Co.-British Dominion Oil & Development Corp.'s No. 9-29-6-7, abnd 3424 ft.

Raymond: Imperial Oil & R. L. Clancey's Imperial-Clancey-Raymond 1, lsd 7 16-6-20w4th, abnd 5600 ft, so in tight Devonian Dolomite.

United States Wildcat Starts

ALABAMA

Sumter County: H. H. Hamilton's Allison Lbr. Co. 1, c se sw 36-19n-4w, dk.

ARKANSAS

Union County: Tide Water-Seaboard's G. Griffin 1, c nw se 33-18s-16w, lcn.

CALIFORNIA

Fresno County: Standard's Griffin 74-18, 18-16s-16e, San Joaquin area, lcn.

Kings County: H. R. Magee's Von Vlahn 17-1, 17-23-22, Tulare Lake area, lcn.

Los Angeles County: Seaboard's Core Hole 1, near Ave. 26 and Lacy St., Los Angeles area, lcn.

Tide Water's Fernando 31, near Sta. 84, Los Angeles City boundary, lcn.

Kern County: Independent Exploration's Movious 36, Premier-Poso area, 4-28-27, lcn.

T. L. Parks-P. & H. Oil Co.'s Dove 1, 25-31s-37e, Mt. View area, lcn.

Richfield Oil's Di Giorgio 3-1, 3-31-29, Arvin-Mountain View area, lcn.

Richfield Oil's Wildflower 1, 12-10n-20w, Wheeler Ridge area, lcn.

Rothschild Oil Co.'s J.O.L. 1, 23-25-27, Jasmine area, lcn.

Rothschild Oil Co.'s Porter 1, 17-30s-29e, Edison area, lcn.

Roy H. Taylor, Tr.'s Childs-Wall 1, 9-32s-38e, Mojave area, lcn.

Western Gulf's Woodward-USL 1, 23-11n-23w, Santiago area, lcn.

Solano County: Standard's Suisun Comm. 6, 3n-1w, Suisun area, lcn.

COLORADO

Prowers County: Union Oil Co.'s Holmes 1, se nw nw 27-21s-46w, dk.

Rio Blanco County: Stanolind's Scott 1, c ne sw 20-1n-93w, Meeker Dome, lcn.

GEORGIA

Wayne County: Harry Byers' Dean 2, 300 nw of c, Ld Lot 127 3rd Ld Dist, dr 300 ft.

ILLINOIS

Lawrence County: Parriott & Sprouls' Southern 1, nw sw ne 2-4n-12w, dr.

White County: Deep Rock Oil Corp.'s Phipps 1, sw sw sw 29-5s-9e, lcn.

KANSAS

Barber County: Huber Corp.'s Mills 1, c sw¼ 33-30s-14w, lcn.

Butler County: Skelly's Kennel 1, ne se ne 20-28s-7e, lcn.

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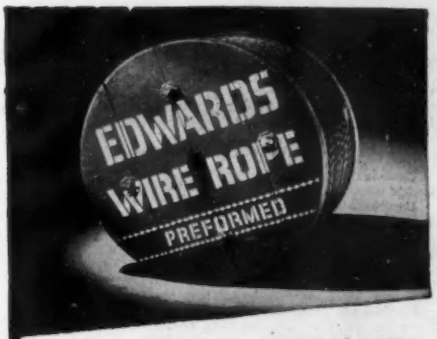

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Ellis County: Royer, Farrie & B&R Drlg. Co.'s Jacobs 1, ne se 26-11s-18w, lcn.
Gray County: Texas Co.'s Seal 1, nwc 9-24s-27w, rur.
Marion County: H. A. Amerine's Weise 3, nw ne ne 36-19s-5e, dr.
Sedgwick County: Geo. Fuller et al's Ternes Est. 1, nwc sw 22-27s-1w, lcn.

NORTH LOUISIANA

Bossier Parish: M. H. Sneed et al's Lodwick Lumber Co. 1, 29-19n-11w, dr 615 ft.
De Soto Parish: C. M. Bagley's Guy 1, nwc 2-11n-13w, lcn.
Franklin Parish: E. C. Laster's J. H. Baker 1, nw nw 4-16n-9e, 4000-ft test, rur.
Natchitoches Parish: California Oil and Signal Co.'s Nebo Oil et al 1, begin at nec of sect go 1975 w 664 s to lcn in 13-13n-8w.
Richland Parish: R. W. Williams' Stone 1, c sw se 30-17n-7e, 7000-ft test.
Tensas Parish: Shamrock O&G Co.'s Panola Co. Ltd. 1, 34-13n-12e, Massive or 8500-ft test.

SOUTH LOUISIANA

Beauregard Parish: Magnolia's Lutcher-Moore 1-A, 660 n&e of swc sw¼ 19-6s-11w, 12,000-ft test.
Calcasieu Parish: Arkansas Fuel O. Co.'s Louisiana State Lse 521-1, 2996 e of wl 5092 n of sl 28-10s-13w, Turner's Island, 9500-ft test.
Union Sulphur Co.-Gulf's W. T. Brannon 1, 1650 n 1980 w of sec 16-11s-10w, Choupique area, lcn.

MICHIGAN

Allegan County: Del Fortney's Hayes 1, ne se se 15-4n-12w, rig.
Arenac County: Sun's Van Horn 1, nw nw sw 26-20n-7e, rig.
Kent County: J. J. McGerry's Corrigan 1, sw sw sw 22-8n-9w, rig.
Mecosta County: Mich. Consol. Gas Co.'s Bush 1, c sw 4-15n-9w, lcn.
Montcalm County: Montcalm Development Co.'s Pollard 1, nw nw ne 8-11n-5w, lcn.
Sanilac County: Shell's Burch 1, ne nw se 15-10n-15e, lcn.

MISSISSIPPI

Covington County: Cities Service's Rubin Tultman 1, 660 ft s 660 ft w of ne 22-7n-16w, lcn.
Forrest County: H. I. Morgan-Dilworth Hager's Batson-Hatten Lbr. Co. 1, (OWDD) c sw nw 20-1s-13w, dr below 8557 ft.
Jefferson Davis County: Superior of Calif.'s Mrs. N. B. Dale 1, ne ne se 29-9n-18w, Tuscaloosa test.
Rankin County: George W. Lyels' L. L. Billings 1, 500 ft fr sl 430 ft fr road in se ne 11-4n-1e, lcn.
Warren County: Union Prod. Co.'s C. J. Harlen 1, c sw se se 1-14n-3e, bldg dk.

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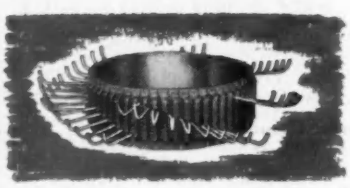

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NEW MEXICO

Eddy County: R. S. Magruder et al (was A. & N. Drilling Co.'s) Pacific Coast Land 1, (OWDD) c sw ne 15-21s-27e, elev 3308 ft, otd 1553 ft, drlg 1770 ft.

OKLAHOMA

Carter County: Skelly's Henry 1, sw sw se 12-2s-2w, mi dk.
Kay County: Chas. Jenkins' Fee 1, se se ne 1-27n-2e, lcn.
Oklahoma County: Gutowsky et al's Crum 1, nw nw se 24-13n-3w, lcn.
J. E. Trigg's Morgan 1, se nw nw 5-14n-3w, lcn.
Payne County: Northern Ordnance's DeWitt 1, ne sw sw 34-20n-4e, mi rig.
Pontotoc County: Joe Miller's Miller 1, sw nw sw 26-4n-4e, dr 1255 ft.
Stephens County: Gulf's Briscoe Est, 1, se nw 36-2n-8w, bldg dk & mit.
Skelly's Chilton-Mayo Unit 1, ne nw se 14-2s-4w, mi dk.

WYOMING

Carbon County: Wasatch Refining Co.'s Dixon 1, 23-19n-78w, dk.
Hot Springs County: Progress Oil Co.'s N. P. Fortin 1, se ne se 6-43n-91w, Murphy Dome lcn.

WEST TEXAS

Crosby County: Geo. P. Livermore's L. M. Weise 1, c ne ne D&W Ry. 64, blk C, 10,000-ft Ellenburger test.
Gaines County: DeKalb Agricultural Assn.'s E. H. Breckon-Fullerton 1, 661 ft wel 658 ft nsl PSL sec 13, blk AX, 8000-ft Clear Fork test.
Garza County: Honolulu Oil Corp.-Devonian Oil Co.'s H. F. Richardson 1, 440 ft out swc sect 1282, BS&F Ry. sur, 4000-ft test.
Tom Green County: Texas Co.'s W. Edwards 1, 1980 ft snl 660 ft ewl of e½ S.P. Ry. 58, dist. 11, Wall prospect, Ellenburger test.
Winkler County: Humble's W. F. Scarborough 1, c ne ne PSL sect 11, blk 27, 3500-ft test.

WEST CENTRAL TEXAS

Taylor County: Paul Steed-E. L. Wilson's M. H. Witt 1, 330 ft nsl 700 ft ewl of 230.4-ac tr and sect 22, S.P. Ry. sur, Jim Ned Valley prospect, lcn 3500-ft Palo Pinto lime test.

SOUTHWEST TEXAS

Duval County: M. E. Davis' Alliance Trust Co. 1, 330 fr n&wl of 100-ac lse, Santos Garcia sect 20 at Realitos, elev 450 ft, 4500-ft test, set surf csg.
Starr County: George H. Echols' M. M. Garcia 1, 330 fr n&s&el of blk 17 sh 7-B porc 91 40-ac lse, n of Boyle fld, 4350-ft test.

LOWER TEXAS COAST

Bee County: Hewit & Dougherty's T. W. Wolfe 1, 614.5 fr nl 467 fr wl of 166-ac tr 614.5 fr sl 100-ac lse, T. B. Barton sur, 8000-ft test, ru.
Jim Wells County: H. J. Porter's Gertrude Rehmet Hoffines 1, 467 fr sel 833 fr swl 52.7-ac lse, Wm. Parks sur, 5400-ft test.
Karnes County: S. H. Howell's K. L. Handy 1, 660 sw 660 se fr n cor of blk 9 155-ac lse, Carlos Martinez sur, 7500-ft test, spud.
Nueces County: Southern Minerals Corp.'s A. M. Stone 1, 467 fr nl 1367 fr el sect 15, Hoffman Petronilla Rch, Roberts & White subdvn, 320-ac lse, 6500-ft test.
Refugio County: Fred W. Shield-Allen & Morris' A. W. J. Heard 1, 330 fr n&el 301.45-ac lse, Refugio town tr, 7500-ft test.

UPPER TEXAS COAST

Colorado County: Superior's Mrs. Matilda Tait 2-A, 330 fr se&swl 500-ac lse, Patrick O'Daugherty sur A-167, ½ mi nw Altair, 1250 s se of 1-A dry hole, 10,500-ft test.
Jefferson County: Shell's McFaddin Trust 1, 660 fr nw&nel 160-ac Smith sur on 7147.2-ac lse, 6 mi w of Port Arthur, 9500-ft test.
Matagorda County: Amerada's W. T. Morrison et al 1, 530 fr wl 660 fr el 660 fr sl 40-ac tr, John Holmes sur A-191, 3 mi se Blessing, 10,500-ft test.
Hamil & Hamil's Texas Co.-Fee 1, 2801 fr wl 100 fr nl 31.14-ac tr, William Hudson sur, 1 mi n of Clemville, on blk 6, Markham area, elev 57 ft, 3000-ft test.
Montgomery County: Pan American Prod. Co.'s J. M. Winslow Heirs 1, 1798 fr el 2012 fr sl 299-ac lse, Edwin Allard sur, 5425 e ne of Pan Am's Posey 1 at Pinehurst, 8700 swly fr Superior's McWhorter D-1 at Lake Creek fld, 12,000-ft test.
Wharton County: J. B. Ferguson's J. B. Ferguson 1, 2997 n 62° e 2113.7 s 28° e of w cor of E. M. Cox ¼ Lge A-14 on 2651.2-ac lse, 6500-ft test.
J. B. Ferguson's J. B. Ferguson 2, n 62° e 3261.2 n 28° w 1008 fr nwc Josua Parker ½ sur A-29 in Griffith sur, 1½ mi s of Mackey, 6500-ft test.
J. B. Ferguson et al's Forrest L. Myers 1, 330 fr n&wl 6148-ac lse, A. Jackson 2 Lges, Prairie Lge A-34, 2 mi w of Hungerford, 6250-ft test.

The OIL WEEKLY'S TRADING POST

USED EQUIPMENT FORUM

CLASSIFIED ADS . . . EQUIPMENT . . . SERVICES . . . PERSONNEL

FOR SALE

■ FOR SALE: 50 H.P. Franklin Engine, complete with Oil Head, Extra Gas Head, Clutch, Heavy Fly Wheel and Foundation. Utility & Industrial Supply Co., 921 Michigan Ave., E., Jackson, Michigan.

■ Lumber for sale, Oak and gum oil field lumber and timbers. Gaiennie, Box 1074, Shreveport, La.

FOR SALE BY OWNER AT SILICA, KANSAS WAREHOUSE

125,000 ft. Used 3" Upset Tubing
20,000 ft. Used 2½" Upset Tubing
3,000 ft. Used 4" Lapweld Line Pipe
3,300 ft. Used 3" Upset Cement Lined Tubing
50,000 ft. Used Jones Type 7 Sucker Rods ⅞ & ¾
3,000 ft. New 3½" 150 lb. test Johns-Manville pipe with fittings
500 ft. New 4" 150 lb. test Johns-Manville pipe with fittings
2,000 ft. New 6" 150 lb. test Johns-Manville pipe with fittings
3,600 ft. New 7" 24 lb. 8 Rd. Thd. Seamless Steel Casing Grade H-40 Range 2
3,200 ft. New 7" 24 lb. 10 V Thd. Seamless Steel Casing Grade H-40 Range 2
4,000 ft. Used 7" 24 lb. 10 V Thd. Seamless Steel Casing Grade C Range 2
5 Lee C. Moore Standard Rig fronts with 11' band wheels complete with 5 O.C.S. counter-shaft clutches, Happy Idlers for long & short belts and 40 H.P. Weber gas engines, galvanized iron engine houses & belt halls that have been Tnemecized.
5 94' Ideco 330,000 lb. galvanized derricks, Tnemecized complete with galvanized bolts, two sheave crown blocks and guy wires. Standing.
1 94' Ideco 330,000 lb. galvanized derrick complete with two sheave crown blocks. Not erected.

Subject to prior sale, withdrawal from market

J. H. Tatlock, Wichita 2, Kansas
L.D. 18 or Local 4-6336

FOR SALE

1 National Drilling Machine consisting of all sills, new mast, new fibre friction pulley, belt, reverse clutch, beam, new temper screw, new wire line clamps.
1 No. 45 Star Spudder now running with TXA Hercules Motor.
1 TXO Hercules Motor re-built and re-conditioned.
1 International 100 HP Motor re-conditioned, good as new.
Short drilling bits and some odds and ends in cable tools.
All of above worth the price. Address P. O. Box 247, Owensboro, Ky.

■ DERRICKS—for sale two Moore Champions 122' x 26' now erected North of Odessa. $700.00 each as is. E. H. GRISWOLD, Box 1801, Midland, Texas.

■ For Sale: One (1) steel beam type drilling-in unit with 110 HP Buda engine, A type mast, drilling and sand lines and Miscellaneous tools —Veeder Supply & Development Co., Cherryvale, Kansas.

FOR SALE

1 6¾" x 14" reconditioned EXK Gardner Denver Power Pump, with sheave.
2 7¾" x 18" Sixteen valve Oil Well Power Pump, less sheaves.
1 14¼" x 7¾" x 18" National Steam Pump.
1 12" x 12" roller bearing Ideal Ajax Steam Engine, with or without seven foot substructure.
1 4 sheave 66" roller bearing National Traveling Block.

EMPIRE OIL FIELD MACHINERY CO.
Odessa, Texas
Telephone LD-18 P. O. Box 4026

NOTICES

■ CAPITAL SEEKERS—Interested in raising $25,000 or more should write to Amster Leonard, Fox Bldg., Detroit 1, Michigan.

■ ALABAMA—New township and section map of Butler County, Alabama, showing major company leases. Hand colored. Send $1.00 now for your copy. W. H. Vernor, 601½ E. Commerce St., Greenville, Alabama. (Phone 444).

LEASES, DRILLING ACREAGE, ETC.

■ So. Georgia shallow sand leases for sale. Blocks 1—5—10—15—20—25 thousand acres. Owners: Box 364, Waycross, Georgia.

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Seismograph Reviews
And Interpretation
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Houston, Texas

SITUATIONS WANTED

■ Employment Wanted—by man with twenty years experience as engineer for Major Oil Company in all phases of management, drilling and producing of crude oil. Reference letters from company if desired. Write: 123 Sidney Street, Longview, Texas.

■ Man, 43, with 20 years experience in California production and drilling operations for major company wants permanent connection as field superintendent or in executive position. Graduate Mechanical Engineer. Positions filled include Field Engineer, Production Engineer, Production Foreman, Assistant Field Superintendent and Division Superintendent. As Division Superintendent supervised producing and drilling operations requiring 600 staff and field employees, including eight rotary crews. Wells drilled varied from 2000 feet to over 12,000 feet in depth. Division budget 8,000,000 yearly. Have just ended 26 months of military service as a commissioned officer. Address: Box 16, c/o The Oil Weekly, Houston, Texas.

■ LAWYER—Experienced in Title Work and Leasing would like position with company as Legal Investigator, "Trouble Shooter" or anything in Legal or Land Departments. Address: Box 14, c/o The Oil Weekly, Houston, Texas.

■ Man with thirty years experience in the land and producing sections of the oil business as individual producer and part of this time as vice-president and executive of a Major Independent Oil Company wants connection with independent interests or financing to carry on developments and other work in connection with producing business. Address: Box 11, c/o The Oil Weekly, Houston, Texas.

ADVERTISING RATES

TRADING POST SECTION

Regular classified advertisements for this special section, set in type this size without border, take flat-rate of 7 cents per word for the first insertion and 5 cents per word for each subsequent insertion of same copy. Display advertisements for this section, set in suitably larger type with ruled border, are $5.00 per inch for the first insertion and $4.00 per inch for subsequent insertions. Remittance must accompany copy which should be sent to:

Trading Post Section, The Oil Weekly
P. O. Box 2608 Houston 1, Texas

EAST TEXAS BORDER COUNTIES

Panola County: W. H. Mitchell's Temple 1, C. F. Hall sur, 7500-ft test.
W. H. Mitchell's Frost Lumber Co. 1, 5 mi sw of Deadwood, 7500-ft test.
Shelby County: Hunt Oil Co.'s Bright 1, John English sur, 8000-ft Trinity series test.

EAST TEXAS

Hill County: Ray T. Rimmer et al's R. A. Norton 1, 5500 ft wel 3450 ft nsl of J. M. McCarter sur, or 2930 ft w of highway 1083 ft s of crk on n 50-ac tr, sd 500 ft.

NORTH TEXAS

Archer County: D. H. Bolin et al's H. F. Harmel 1-A, 841 ft snl 150 ft ewl of TE&L Co. Sec 2491, lcn.
E. P. Griffin & Frank Wood's Mankins 1, ne ne ne H&TC Ry. 12, blk 4, 5000-ft Ellenburger test.
W. M. McMahon & H. M. Kelleher's J. H. Turbeville 1, 900 ft snl 150 ft ewl sect 148, Robt. Carson sur, 1600-ft rotary test.
Republic Natural Gas Co.'s Dan M. Powell 1, 500 ft snl 150 ft wel of lot 3, S.P. Ry. sec 1, A-1406, 1500-ft rotary test.
W. C. Young et al's J. C. King 1, 1050 ft nsl 1310 ft ewl TE&L Co. sect 2422, 1500-ft rotary test.
Cooke County: Texas Co.'s M. Morris 1, 330 ft out nec of M. Wilkinson sur A-1124, dk for 4200-ft test.
Jack County: Continental's T. H. Cherryhomes 1, 990 ft snl 3630 ft ewl of John Irvin sur A-313, 6700-ft Ellenburger test.
Wise County: Homer W. Snowden et al's Mrs. Ella Thomas-Gulf 1, 450 ft out of nwc lot 27, Matagorda CSL sur, 4000-ft rotary test.
Young County: Dunlap & Graham s Mrs. C. J. Taack 1, 330 ft out nwc of TE&L Co. sect 248, 3000-ft cable test.
Blackwell O&G Co.'s Mrs. O. Kimbrell 1, 920 ft out sec of W. A. Crumpton sur A-1391, 3200-ft rotary test.

TEXAS PANHANDLE

Wheeler County: Sinclair Prairie's R. D. Mills 1, c ne ne H&GN Ry. 18, blk A-7, 8500-ft Ellenburger test.

WESTERN CANADA

Southern Saskatchewan — Pennant: Norcanols O&G Co.'s Pennant 1, lsd 4 14-18-16w3rd, lcn.
Alberta Foothills — Stolberg: Imperial Oil-Shell of Canada's Imperial-Shell-Stolberg 1, lsd 3 22-41-14w5th, ru.
South Alberta Plains — Conrad: Mid-Continent O&G-East Crest Oil Co.'s Mid Continent-East Crest 2, se lsd 7 8-6-15w4th, dr.

HELP WANTED

—WANTED—

MECHANICAL AND ELETRICAL ENGINEER

Oilfield Equipment Manufacturer of International prominence located in Beaumont, Texas, desires to employ qualified Mechanical or Electrical Engineer to assist in the design of D.C. Electric Drilling Rigs. Good salary, with unlimited post-war possibilities. All answers strictly confidential. Address: Box 6, c/o The Oil Weekly, Houston, Texas.

■ Wanted by a consulting geophysical organization, Petroleum Engineers with Hayward Mudlogging experience or its equivalent. Immediate openings in Venezuela. Excellent opportunity for advancment to managerial positions throughout the world. Address: Box 36, c/o The Oil Weekly, Houston, Texas.

■ Engineers Wanted: Graduate Ch.E., M.E. or E.E., 20 to 29 years of age, having refinery or laboratory experience. Essential industry with postwar continuance. State education, experience, salary expected, and date of availability. P. O. Box 2546. Houston 1, Texas.

■ Wanted Pipe Line Construction Inspectors. Rush application airmail giving complete past employment record and at least six references with complete names and addresses. State salary expected. Apartado 1005, Monterrey, N. L. Mexico.

MECHANICAL ENGINEER

Nationally known oil field equipment manufacturer will employ qualified mechanical engineer, familiar with well completions, to assist in the design of production equipment. Permanent with excellent future to the right man. Locality, Houston. Replies strictly confidential. Address: Box 10, c/o The Oil Weekly, Houston, Texas.

Did you know that more men exclusively engaged in the drilling-producing business subscribe to **The Oil Weekly** than to any other paper? If you want to buy, sell or exchange good used equipment, a low-cost advertisement in these columns will get action for you in a hurry. See rates below.

EIGHT interchangeable cutters. Fast cutting action, directed at 30 degree angle, cutters are hard surfaced steel. See Composite Catalog or write for Bulletin and additional information.

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Fig. A-133, Threaded

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Men in the Industry's News

JULES E. TOUSSAINT has been named general manager of the producing department for Standard Oil Company of California, San Francisco.

J. E. Toussaint

He joined the company 23 years ago as a construction assistant at the Richmond refinery and became a draftsman, then an engineer and assistant chief engineer at the refinery.

After being transferred to the company's San Francisco headquarters, he was named manager of the producing department's organization and cost control division. Later he went to Los Angeles as assistant general superintendent of the producing department's southern district. He returned to San Francisco in 1940.

During the latter part of 1943, he became known as "One-a-Day" Toussaint by completing an average of a well a day. This pace has been accelerated, and in February his division set an all-time record in the company's drilling history with 67 completions.

In 1944 Toussaint's staff broke the world's well depth record by drilling KCL 20-13 in the Coles Levee field near Taft, California, to 16,246 feet.

Toussaint is a member of the API, the Petroleum Production Pioneers and the Commonwealth Club of California.

MAJOR DONALD NOLL, former junior geologist for The Carter Oil Company in the Eastern Division, has been awarded the Bronze Star for gallantry in action on Tinian.

ROLF ENGLEMAN has been transferred by The Carter Oil Company from Casper, Wyoming, to Oklahoma City, where he will be Oklahoma division geologist, succeeding S. M. Willis, resigned.

P. W. HENNESEY, division superintendent of the pipe line division of The Ohio Oil Company at Casper, Wyoming, has been granted an indefinite leave of absence because of illness and is being succeeded by R. M. Sackett.

F. W. BUTLER of Tulsa, Oklahoma, has been elected vice president and general sales manager of The Carter Oil Company. Butler has been in charge of marketing and sales for Carter since May, 1944, and has been connected with the Standard Oil Company (New Jersey) since 1921.

F. W. Butler

He has directed distribution and sales in Louisiana, Virginia, Tennessee and in Carter's operating territory.

DAVID PROCTOR has been elected director, vice president and general counsel and a member of the finance committee of Gulf Oil Corporation, director and vice president and general counsel of Gulf Refining Company, and director and general counsel of all other principal Gulf companies.

David Proctor

For many years he has held the post of assistant general counsel and secretary of Gulf Oil Corporation and Gulf Refining Company and all other principal Gulf companies. His headquarters will continue to be at Pittsburgh.

P. O. SETTLE, of Fort Worth, attorney for the Gulf Companies for many years, has been elected associate general counsel and secretary of Gulf Oil Corporation and Gulf Refining Company and all other principal Gulf companies. His new headquarters will also be in Pittsburgh.

H. L. STONE, former general counsel for 32 years, has resigned, but will continue in the exclusive employ of the company, as consulting counsel, with headquarters in his home town of San Angelo, Texas.

BRUCE HARLETON, research geologist Amerada Petroleum Corporation, has concluded a tour that kept him away from Tulsa office for nearly three years.

JAMES A. DUNN, president of Barnsdall Oil Company, is making an inspection trip of B-Square properties in the Mid-Continent and Gulf Coast territories.

W. S. MORRIS, past national chairman of the petroleum division, American Institute of Mining & Metallurgical Engineers, reviewed the annual meeting of the board of directors held in New York recently, before the East Texas Section at Kilgore.

HUBERT GUYOD, connected with Halliburton Oil Well Cementing Company in its Houston branch, gave an address March 15 before the Houston Geological Society on "Recent Trends in Electrical Logging Interpretation."

G. E. ARCHIE, research engineer for Shell Oil Company, Houston, addressed the Permian Basin Engineers Association at Midland, Texas, March 15, on electric logging.

JACK BARKALOW of Lane-Wells Company discussed the Gamma Ray at the monthly meeting of the Ardmore, Oklahoma, district association of oil scouts. C. A. Patchen, Tide Water Associated Oil Company scout in Oklahoma City, was named a delegate to the National Oil Scouts and Landmen's Association meeting in Dallas March 26. T. G. Price of The Carter Oil Company was elected editor of the yearbook.

CARROLL V. SIDWELL, former manager of production for Northern Ordnance, Inc., has formed the Sidwell Engineering and Drilling Mud Company with offices in the Hunt Building, Tulsa.

PAUL GRIFFIN, who recently retired as president of the Oklahoma Pipe Line Company, Tulsa, Oklahoma, was honored at a dinner in Tulsa. Prominent oil officials from New York, Houston and other cities attended. Griffin started in the oil business with the old Prairie Oil & Gas Company more than 40 years ago. He is now in a consulting capacity to the Interstate Pipe Line Company which was recently organized when the Oklahoma and Louisiana Pipe Line Companies were merged.

Paul Griffin

H. J. STEWART has been named engineer for the Gulf Coast division of Sunray Oil Corporation, with headquarters at Victoria, Texas. He started work for the company in 1944 and has recently spent several weeks in Tulsa, Oklahoma, at the home office. He graduated from Oklahoma University in 1936 as a mechanical engineer.

JOHN P. LUKENS of the Oklahoma Seismograph Company, Shawnee, Oklahoma, gave a lecture on "Seismograph" before the Shawnee Geological Society.

E. D. KENNA director of the Mississippi State Highway Department since 1932, has resigned to become executive vice president and secretary-treasurer of the Mississippi-Alabama division of the Mid-Continent Oil and Gas Association.

E. C. REECE, former Healdton, Oklahoma, district foreman for Shell Pipe Line Corporation and more recently in the personnel department, has been promoted to superintendent of the Wasson-Hobbs district, embracing the north end of Shell's West Texas-New Mexico system.

E. P. JONES, former development engineer with The Linde Air Products Company, has resigned to join the Pressure Weld Company, Houston, as general superintendent.

C. C. MICHEL, in charge of the McCamey, Texas, station for Dowell Incorporated, has resigned to become a partner in the Acid Engineer Company, Tulsa, and will have charge of that company's Edmond station. Michel is a graduate of Oklahoma A. & M. College and was with Dowell for about four years.

C. A. PATCHEN, scout for Tide Water Associated Oil Company, was elected delegate to the National Oil Scouts and Landmen's Association meeting in Dallas, March 26.

Deaths

LIEUT. JOHN B. WARREN, JR., president of Warren Automatic Tool Company, Houston, has been killed in action in the Pacific.

Lieut. Warren

Born in Houston on July 3, 1912, Lieut. Warren attended Virginia Military Institute and then entered Rice Institute, from which he was graduated in 1933. After a year with Humble Oil & Refining Company he took postgraduate work at the University of California, and in 1935 joined Quintana Petroleum Company and was stationed at Refugio, Texas. At Refugio he invented the "Mud-O-Graf" for automatically determining and recording the specific gravity of drilling mud.

In 1939 Lieut. Warren organized the Warren Automatic Tool Company for the marketing of the machine and others of which he was the inventor. He entered the Navy in April, 1942, and was stationed first at Brooklyn, then Houston, and in 1944 he was attached to the amphibious forces in the Pacific as executive officer and assistant gunnery officer on an attack transport.

WILL M. PAYTON, Mexia, Texas, oil operator and member of the firm of Payton Brothers, with holdings in Texas and Louisiana, was fatally injured near Handley when his car was in collision with a bus March 14. He was 61.

ROBERT C. GRINNELL, pioneer oil producer, equipment manufacturer and philanthropist, died in Oklahoma City March 17. Grinnell, 68, was a native of Oakland, California. In his youth he worked as a ranchhand and in a grocery store. He engaged in railroad building in Mexico and in mining in Colorado before entering the oil business in Texas. Shortly after Pearl Harbor he converted his California company into war production and devoted most of his time to war contracts in Oklahoma and Texas. He was a member of the Independent Petroleum Association of America.

H. B. McKINLEY, former assistant treasurer of Caterpillar Tractor Company, died in Hollywood, Florida, March 6. He was 71.

Starting as an errand boy for a Philadelphia florist, McKinley became a bookkeeper in that city and in 1918 served as an accountant with the U. S. ordnance department with assignment to The Holt Manufacturing Company plant in Peoria. He became associated with the purchasing department at the plant and was made credit manager when the Holt Company became Caterpillar Tractor Company. He was named assistant treasurer of the company in 1927 and held that position until his retirement in 1940.

FRED DAVID STANLEY, chief engineer at The Parkersburg Rig & Reel Company's Coffeyville, Kansas, plant, died at Coffeyville February 22. R. G. De La Mater, vice president in charge of engineering of The Parkersburg Rig & Reel Company, announced that Stanley has been succeeded by C. A. Anderson, former assistant chief engineer at the Coffeyville plant.

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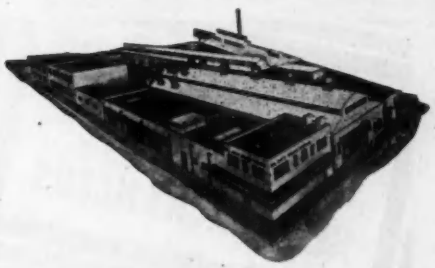

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Squeaks from the Bull Wheel

Can You Bear It?

Grandpappy Morgan an Ozarks hillbilly who had a reputation for being a man of few words, wandered into the woods one day and failed to return for supper. Young Tolliver was sent to look for him and found Grandpappy standing in the bushes.

"Gettin' dark, Grandpap."
"Yep."
"Time for supper, Grandpap."
"Yep."
"Ain't you hungry, Grandpap?"
"Yep."
"Well, air ye comin' home?"
"Nope."
"Why ain't ye?"
"Standin' in a bar trap!"

Good Guessing

"Take hold of this wire."
"This one? Okay."
"Feel anything?"
"Nope."
"Then don't touch the other one; it carries over 5000 volts."

Likes Green Things, Too

"I call my sailor friend 'Stag.'"
"Why?"
"Oh, he's such a dear and he has no dough."

Wrong Number

He asked for burning kisses,
She said in accents cruel—
"I may be a red-hot mama,
"But I ain't nobody's fuel!"

Mow Me Down

"Which weeds in your garden are the easiest to kill?"
"Widow's weeds. You only have to say 'wilt thou,' and they wilt."

Correction

"Have you a ladies' waiting room in this station?"
"No, ma'am, but we got a room for ladies that can't wait."

Explanation Accepted

"Private Jones, you're an hour late with those supplies."
"Yeah, Sergeant, but I picked up a chaplain along the road and from then on the mules couldn't understand a word I said."

Shortage

"Boss, I must have a raise in salary—three other companies are after me."
"Name them."
"The light company, the phone company and the water company.

She Caught Him

A mountaineer found a mirror. "Well, well, if it ain't a pitcher of my old pappy," said he, and took the mirror home and sneaked it into the attic.

But his wife was suspicious and that night while he slept she slipped up to the attic and found the mirror. "So that's the old hag he's been a-chasin'."

The Facts Will Out

"Sarge, I'm seasick. What can I do?"
"Don't worry, son; you'll do it."

Poet's Nook

I shot an arrow into the air.
It fell to earth, I know not where.
I lose more damned arrows!

Encore

Ashes to ashes
Dust to dust.
Admire my sweater
But don't you touch
My sorority pin.

Standco
NO-SMOKE

STANDCO BRAKE LINING
for the easiest brake known. It "feeds off" evenly. Standco never scores brake rims. See page 2808 Composite Catalog.
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TULSA

Notes for the Equipment Buyer and User

Level-Lift Sling

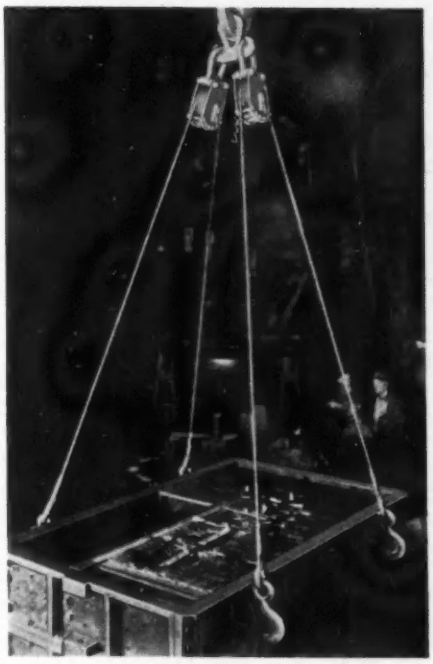
MACWHYTE COMPANY

Macwhyte Company, Kenosha, Wisconsin, announces that its "Level-Lift" wire rope slings are now made in ¾, 1½, 3 and 6-ton capacities.

The manufacturer claims unusual safety features for the sling. In operation, after the light-weight block containing wire rope is put on the crane hook, the crane operator spots the crane hook over the approximate center of gravity of the load and the floormen attach the sling to the load.

The crane operator then applies the power to lift the load, and as the crane hook is lifted, the rope automatically adjusts itself through the "Level-Lift" block. In so doing, one sling leg of rope becomes longer than the other, and as the weight of the load pulls on the wire rope, the sheave in the block pulls down against a brake which prevents slippage. The load is then lifted level.

Should the crane operator not get the block and crane hook close enough to the center of gravity of the load, it is only necessary for the operator to lower the load enough to relieve tension on the sling which releases the brake and then move the crane hook over a little to the true center of gravity. On applying the power, the ropes readjust themselves and the load rises level.



Macwhyte Level-Lift Sling

Paraffin Solvent Developed By Klenzoyl Firm of Dallas

Klenzoyl Distributing Company, 1421 Republic National Bank Building, Dallas 1, has developed a paraffin solvent recommended to keep oil wells, tubing, flow lines, ship and tank bottoms clean. It is claimed that this solvent is an advanced chemical development, harmless to the equipment either as an undiluted chemical or when in combination with fresh oil. It is a solvent and not an acid.

The solvent is intended to keep well, tubing, flow lines, tank and ship bottoms clean, by regular use at stated intervals as needed. Once the paraffin or asphalt from rods and tubing is removed, it can be kept from reforming for the life of the well by a drip system using less than a cup a day per well.

The solvent is not explosive and will not become ignited by flame, and the fumes from it are not unpleasant or harmful.

Radio Program Sponsored By Lane-Wells Company

The Lane Wells Company, with headquarters in Los Angeles, California, is sponsoring an oil news radio program which will be broadcast from station KTRH, in Houston, at 5:30 p. m. five times weekly, Monday through Friday. The first broadcast was on March 19.

The program, "News of the Oil World Today," will bring news of wildcat locations, discoveries, drilling progress and completion information on important wells, news of national scope, legislation affecting the oil industry, and personal items about men in the industry.

Lighting Unit

HOLOPHANE COMPANY

Holophane Company, 342 Madison Avenue, New York City, New York, has developed a fluorescent lighting unit designed especially for the petroleum industry.

The unit has vapor-tight, Class II Group E, Class II Group F, and Class II Group G ratings and is approved by Underwriters' Laboratories. The unit is rugged and sturdily built for use under severe operating conditions. The lenses are made of high-stress glass said to be able to withstand unusual mechanical and thermal shock and are cemented in place.

Low depreciation is said to be a feature of the lamp. The total depreciation between lamp changes will be: lamp .85, dust and dirt .95 or a total of .8. Servicing is simplified by the side door openings, as the lamps or ballast of the entire assembly can be quickly removed through the door.

Alloys Catalog Issued

Magnesium Division, The Dow Chemical Company, Midland, Michigan, has published a catalog on magnesium alloys. The booklet answers the questions, "who? what? when? where? why?" of magnesium and is amply illustrated.

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TULSA, OKLAHOMA

L. F. CAMPBELL was named vice president in charge of manufacturing, precision gear division, at a meeting of the board of directors of Foote Bros. Gear and Machine Corporation, Chicago. Others named were R. B. Moir, assistant vice president in charge of sales engineering, industrial gear division; E. A. Johnson, assistant vice president in charge of manufacturing, industrial gear division; I. C. McVicar, assistant secretary; and L. J. Malina, assistant treasurer.

L. F. Campbell

A. S. VANDERVOORT, Jr., has been made sales manager of the mid-continent district for Pittsburgh Steel Company, Pittsburgh. From his headquarters at Houston, Vandervoort will direct the sales activities of the west central states and Gulf Coast area. Vandervoort was district sales manager at Houston before entering the Army in July, 1942.

S. E. Elder is now assistant sales manager, mid-continent district, with headquarters at Tulsa. He was formerly district sales manager at Tulsa.

Paul R. King has returned to Pittsburgh Steel Company as sales representative on all products with headquarters at Tulsa. Before entering Army service in October, 1942, he was sales representative for the company at Houston.

George W. Novak has been made chief engineer, mid-continent district, with headquarters at Houston. Novak has been field engineer for the company at Houston for many years and, before Vandervoort's return, was acting district sales manager there.

WARREN I. BER has joined the staff of the Texas Iron Works, of New Iberia, Louisiana. He was formerly associated with the Schlumberger Well Surveying Corporation and was located at Houma, Louisiana.

TOM L. TURNER has joined the American Iron and Machine Works Company as representative with offices in Houston. He formerly was a member of the editorial staff of THE OIL WEEKLY.

Tom L. Turner

Educated in Fort Worth, he joined the engineering department of the City of Fort Worth as a civil engineer, later going to The Pure Oil Company in the same capacity.

In 1932 he became associated with the United Gas Public Service Company, and in 1937 became store manager of the International Supply Company store in Hobbs, New Mexico, which became part of the Bethlehem Supply Company. He served with the Bethlehem as Store Manager at Avoca, Wichita Falls, and Freer, Texas, before coming to Houston in 1942.

Clevis Ring

POULSEN & NARDON

Poulsen & Nardon, Terminal Box 2398, Los Angeles 54, announces a clevis ring made to exacting dimensions from alloy steel by a simple stamping operation, and yet retaining the full strength qualities of the steel. Each ring is cadmium plated. The ring fits any standard cable terminal and is said to have a strength factor in excess of the cable with which it is used.

Allied Welding to Open Office at Corpus Christi

Allied Welding and Engineering Company will move headquarters from Houston to Corpus Christi in April.

Claude M. Anderson is owner and Miss Zeffie Evans in office manager for the pipe line contracting firm, which also handles a line of oil field supplies. The firm has recently added considerable new equipment, including tractors, ditching machines and welding machines.

The company is building a warehouse for its office at Alice, where R. H. Allen in manager.

New York Office Opened By Prufcoat Laboratories

Prufcoat Laboratories, Cambridge, Massachusetts, has opened a branch office at 50 East 42nd Street, New York City, with David E. Long as general manager in charge of sales and service engineering. The company specializes in acid-proof, alkali-proof and waterproof protective coatings for industry, and has supplied much of the corrosion-proofing coatings used in the new plant construction of the synthetic rubber industry.

W. B. HOLTON, JR., president of the Walworth Company, manufacturers of valves and fittings, has been elected president of The Valve Manufacturers' Association. Since March, 1943, he has been production consultant and head of the Valve and Fittings Industry for the War Production Board in Washington. He is still a member of the advisory committee which assists WPB on matters pertaining to the valve and fitting industry.

W. B. Holton, Jr.

R. E. SPRENKLE has been named hydraulic engineer for Bailey Meter Company, Cleveland.

He will continue to act as consultant on problems of fluid flow and will supervise research on fluid flow. Sprenkle has been associated with the company more than 20 years, during which he has conducted investigations in the hydraulic laboratories of numerous engineering schools. He has served for many years as a member of the American Society of Mechanical Engineers research committee on fluid meters.

R. E. Sprenkle

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